

FINANCING OF NEW COMPANIES

(A Study of Companies Promoted in India During 1956-57 to 1960-61)

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Preface

This is an empirical study of fifty seven new companies started during April 1956 to March 1961. It is designed to find out the pattern of financing of these companies and to bring into sharp focus the peculiarities of their fund flows and capital structures during first four years of their existence, and, to contrast these with the pattern of more matured companies. This has involved some amount of theoretical discussion as well as collection and analysis of statistical data.

I take this opportunity to express my gratitude and thanks to Dr G. Balakrishnan of the Research and Statistics Division, Company Law Board, New Delhi who permitted me to utilize the material in his Department and also rendered valuable suggestions during my stay at New Delhi. I am also thankful to Shri Satish Kumar of Delhi College for his help in data collection and to Shri S.M. Dugar, formerly the Registrar of Joint

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Inishta

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Part One

CHAPTER ONE

Introduction

The present study has been designed to analyse the financing of new companies. It is divided into the following four parts:

- (i) Capital Issues;
- (ii) Fund Flows;
- (iii) Capital Structure; and
- (iv) Summary of Findings.

Part one includes four chapters. In the first chapter, the plan of the study is explained. The second chapter discusses theoretical aspects of raising finance for a new company. In the third chapter, capital issues of new companies have been analysed and interpreted. Floatation costs of these issues have been discussed in the fourth chapter.

Part two includes two chapters. In the fifth chapter theoretical aspects of fund flow analysis are discussed. The sixth chapter contains analysis and conclusions regarding fund flows of new companies during first four years of their existence.

Part three includes seventh and eighth chapters. The seventh chapter discusses the theoretical aspects of

optimal capital structure. The eighth chapter contains analysis and interpretation of the pattern of capital structure of new companies during first four years of their existence.

Part four includes only one chapter. In this chapter all important conclusions of the study are put together.

This study covers those companies which were promoted during April 1956 to March 1961 and had issued and advertised their first prospectuses in press during this period. Thus, it excludes private companies and companies in the public sector. Besides, financial and investment companies which have different type of financing pattern have also been excluded.

Information regarding published prospectuses was gathered from the Research and Statistics Division of the Company Law Board, New Delhi, newspapers, and financial and economic periodicals. Effort has been made to cover maximum number of companies issuing and advertising their prospectuses during the period.

Official data on companies are available in terms of existing companies or new registrations, but not in terms of first prospectuses issued and advertised. The Controller of Capital Issues, the Registrars of Joint

Stock Companies and the Research and Statistics Division of the Company Law Board do not publish information about companies issuing and advertising their prospectuses. However, since 1961, the Research and Statistics Division of the Company Law Board has been carrying on some analysis for all companies taken together, new and existing ones, on the basis of prospectuses issued and advertised.

The Reserve Bank of India Bulletin of February 1961 and June 1964 contained certain figures on initial issues made during 1956 to 1961. These figures are given in Table T.1.1.

Table T.1.1. : Initial Issues by Public Limited Companies

Year	Number of Companies	Amount (Rs. in lakhs)
1956	10	450
1957	5	40
1958	9	610
1959	14	1250
1960	33	2961
1961	53	3652
Total	124	8836

Source: Reserve Bank of India Bulletins, February 1961 and June 1964.

As against figures for initial issues appearing in Table T.1.1, figures relating to initial issues included in this study are contained in Table T.1.2.

Table T.1.2.: Initial Issues During April 1956 to March 1961

Year	Number of issues**	Amount (Rs. in lakhs)
1956-57	9	340.0
1957-58	4	52.1
1958-59	4	540.0
1959-60	12	2220.5
1960-61	28	2249.0
Total	57	5401.6

Initial issues made through issue and advertisement of first prospectuses in press during the period.

**Ordinary and preference shares and debentures issued at a time have been regarded as one issue.

Comparison of Table T.1.2. with Table T.1.1. indicates that coverage of two studies is almost the same. The little difference is perhaps largely due to the differences in the periods covered.

The Reserve Bank of India publishes regular studies on company finances in its monthly Bulletins. Studies

relating to 'Finances of Small Public Limited Companies' and 'Finances of Indian Joint Stock Companies' are of special interest in this context. Two samples include 1015 companies and 1333 companies respectively. Since the coverage of both the studies is fairly extensive, their averages can be reasonably treated as the normal for matured companies for comparison with averages of infant companies covered in the present study. Wherever it has been found meaningful, the results of this study have been compared with those of the Reserve Bank of India studies.

CHAPTER TWO

Financing A New Company

Any proposal to start a new business needs first to be examined in terms of its technical and market feasibility. If on these tests it turns out to be sound, the next step is to work out the resource requirements and the capital necessary to acquire those resources. Along with this one can also work out profitability of the proposal in terms of the rate of return. Once these estimates are made, the plan for raising the needed finance can be worked out. In order to do this, one has to seek answers to several questions: How much of different types of capital, fixed and working, the business is likely to need during future years and when? What different sources can be tapped in order to raise necessary capital so as to be available at the time when it will be needed? How far the capital market conditions will determine the choice among different sources of raising the capital? How can the balance between risk, income and control be achieved under different mixes of capital to be raised: as between ordinary shares, preference shares, debentures, term loans, etc.? What would be the impact of various contracts for raising capital on the liquidity position in future? Would present decisions minimize the cost of capital and result in a balanced capital structure and leave enough leeway for expansion in future? Answering these questions

in concrete figures is what the plan for raising initial capital really involves.

In this connection, example of a company under study can be cited. The company, Anil Hard Boards, Ltd., estimated its initial capital requirements as follows:

<u>Requirements</u>	(Rs. in lakhs)
Property and Assets	40.30
Carriage, Insurance, Taxes, Customs, etc.	5.55
Cost of Land, Rail Roads, etc.	2.90
Cost of Building	10.30
Cost of Erection	2.65
Working Capital	6.30
Total	<u>68.00</u>

A very large part (about 91%) of capital requirements in this case are of fixed nature. Further, the company proposed to raise major portion (about 59%) of its capital requirements through purely long-term sources as follows:

<u>Sources of Capital</u>	(Rs. in lakhs)
Issue of Ordinary Shares	30.00
Issue of Preference Shares	10.00
Deferred Payments (arranged with the suppliers of machinery)	28.00
Total	<u>68.00</u>

Estimating capital requirements is the first step. Capital to be raised is adequate if it meets all the initial requirements of the company. The adequacy of capital, therefore, will depend upon the estimate of capital requirements of the company. The company in question has estimated the cost of installing the plant (property, assets, carriage, insurance, land, rail roads, cost of erection, etc.) at Rs.61.70 lakhs. Once this cost has been worked out, the next step is to estimate the working capital requirements. Certain amount of working capital is very essential for starting the operations of an enterprise. Besides, the revenue (and funds) generating capacity of a company in the first few years is usually poor. Hence, working capital in adequate amount has to be included in the estimate of initial capital requirements of a company. If a company fails to provide for adequate working capital, it would be starting with a very weak financial base. The company in question has also included working capital in its estimate of initial capital requirements, though its adequacy cannot be judged on the basis of information at hand.

Again the problem is: Is it possible for the company to raise the estimated amount of capital? There are alternative sources of capital and each source has different bearing on risk, income and control. A company will choose that mix of alternative sources which makes possible the maintenance of balance between risk, income and control.

Ordinary share issues have direct bearing on voting power of shareholders and the earnings/dividend per share. Though their inclusion in any combination of alternative sources is inescapable but additional issues after certain limit would lower down the rate of dividend to ordinary shareholders and would dilute the controlling power. But low proportion of ordinary share capital would cover less risk from creditors' point of view and borrowed capital might be available at a higher rate of interest to compensate for higher risk.

Debentures affect risk and income differently because interest is a deductible item for tax purposes. On the one hand, they have leverage effect on shareholders' income. But debentures or any other type of debt capital require certain conditions to be fulfilled, which usually restrict further borrowings and the rate of interest rises as security margin declines. Further, default in payment of interest or repayment of principal would turn the firm insolvent. Therefore, the proportion of this source in total sources has to be limited.

Taking peculiarities of the capital market into account, a combination of sources of capital has to be worked out and the capital has to be raised accordingly. If the combination is such that it does not get proper response in the capital market, it is unrealistic. For instance, the company in question has chosen ordinary and

preference shares and deferred payments as the sources of capital. Instead of debenture issues or direct long-term loans, it preferred deferred credit from the suppliers. The company's preference for such type of combination might be due to fear of inadequate market response for debentures or higher cost of term loans. With the limited information at hand, it is difficult to say as to what prevented (or tempted) the company from issuing debentures or to negotiate term loans.

Borrowed capital may be raised from long-term as well as from short-term sources. Long-term sources may involve repayment of capital after a long time, while short-term loans have necessarily to be repaid in near future, and, therefore, the firm has to maintain sufficient liquidity to avoid any default. The balance between short-term and long-term capital will very much depend upon the degree of risk involved. The degree of risk, in turn, would also affect the cost of particular source of capital. During initial years, a firm may avoid short-term loans because of its weak liquidity position, but as years pass, short-term loans might get an increasingly bigger place in the capital structure of a company.

A firm has to minimize its cost of capital subject to maintenance of balance between risk, income and control, and the constraints imposed by the market conditions. Each

alternative source or mix of sources affects these differently. Further, a firm aims at survival as well as growth in future. Therefore, initial financing plan in general, and the choice of sources of raising capital in particular, should be such that enough flexibility is built into its capital structure permitting wide range of choices in future as the firm grows and raises more capital.

CHAPTER THREE

Capital Issues by New Companies

Capital issues by new companies have been divided into two groups: initial issues and further issues. Initial issues are made for the first time by a company at the time of promotion; further issues are made subsequent to initial issues.

Information regarding initial issues has been collected from the prospectuses appearing in press, company balance-sheets and annual reports.

Only twenty seven companies under study made further issues within first four years of their existence. Information on further issues has been obtained from company balance-sheets and annual reports.

Number and Amount of Issues

Initial Issues

Table T.3.1. contains figures relating to initial issues during the period under review.

Table T.3.1.: Initial Capital Issues by New Companies*

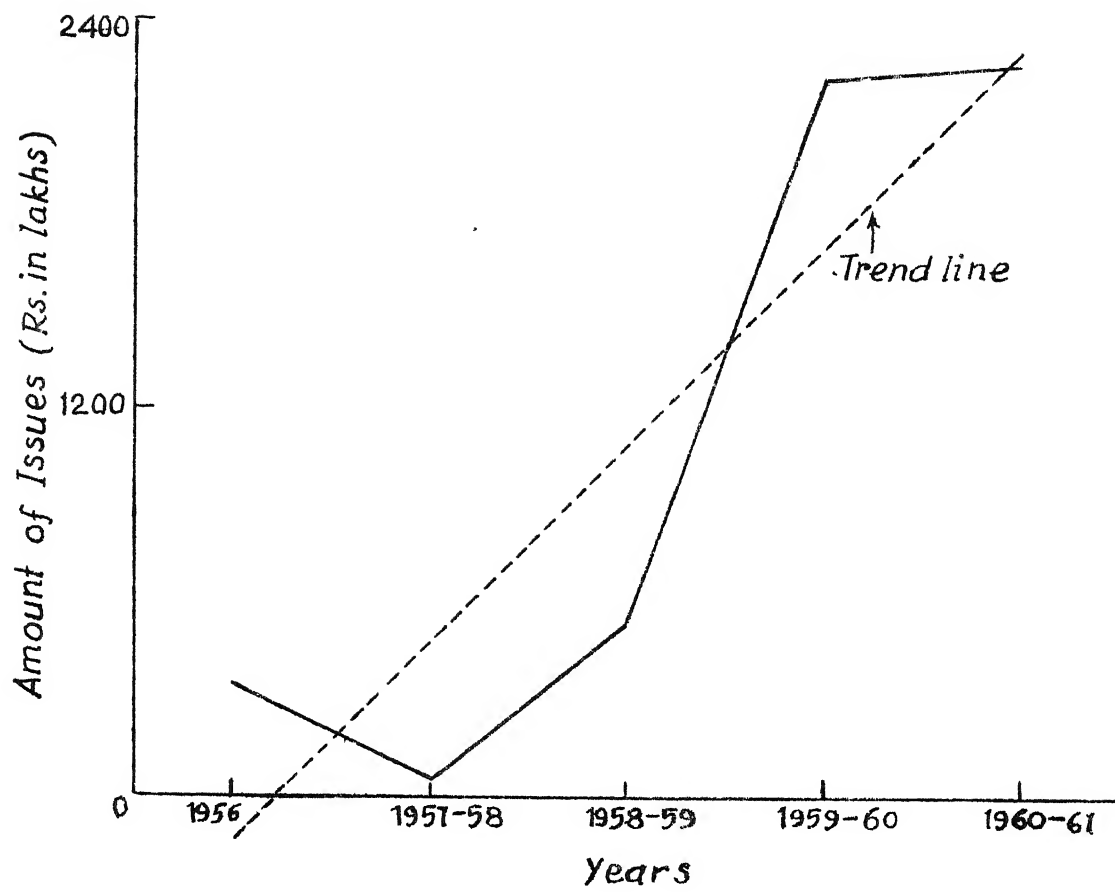
Year	Number of issues	Amount (Rs. in lakhs)
1956-57	9	340.0
1957-58	4	52.1
1958-59	4	540.0
1959-60	12	2220.5
1960-61	28	2249.0
Total	57	5401.6

*Issue of different securities initially made at a time has been regarded as a single issue.

This Table reveals large variation in number and amount of issues from year to year. The amounts of initial issues in different years have been graphed in Figure F.3.1. and a trend line has been fitted:

$$y = -725.6 + 603.6 x.$$

Figure F.3.1.: Capital Issues by New Companies



Although the trend line shows a steep rise, there are significant variations around it. For instance, in 1957-58, there was a significant fall in amount as well as number of issues. Reasons for this fall might be attributed to: great uncertainty resulting from the passage of the Companies (Amendment) Act, 1956, increase in income tax rates in November, 1956 and May, 1957, and, introduction of Wealth Tax on companies.

However, from the beginning of 1958, the conditions began to take a turn with brightened prospects of foreign aid and expectation of bonus shares from some leading companies. The reduction in excise duty in March, 1958, discontinuance of the Compulsory Deposit Scheme for companies, various export-promotion measures adopted by the Government from time to time and withdrawal of wealth tax on companies were interpreted by market as indicative of a welcome change in the Government's attitude towards the private sector. Year 1959-60 can be taken to be the year when favourable market conditions had actually set in.*

*1. NCAER: Capital Market in a Planned Economy, 1966;
Chapter 4, pp. 27-30.

India
2. Reserve Bank of India Bulletin, February, 1961, pp.165-6.

The above analysis brings out two important points. First, the amount of capital raised through initial issues shows a steeply rising trend. This is accounted for by the programmes for accelerated industrialization during the period. Second, there are two clearly marked phases around the trend line. In the beginning the actual amount is below the line; later it is above it. This is accounted for by two opposite climates in the capital market. Thus, it can be concluded that when market conditions are unfavourable, the number and amount of initial capital issues are below the average, but as conditions turn favourable, they go up above the average.

Further Issues

Out of fifty seven companies making initial issues, twenty seven companies made further issues amounting to Rs.1399.9 lakhs within first four years of their existence. Out of these, two belonged to those which made initial issues in 1956-57, three each to those which made initial issues in 1957-58 and 1958-59, eight to those which made initial issues in 1959-60 and eleven to those which made initial issues in 1960-61.

Table T.3.1. contains figures showing the pattern of further issues by new companies during first four years of their existence.

Table T.3.2: Further Issues by New Companies

Year	(Rs. in lakhs)					
	Initial Issues		Companies making further issues		Total capital issued	Further issues as per cent of total capital issued
	Number	Amount	Number	Amount		
1956-57	9	340.0	2	29.5	369.5	8%
1957-58	4	52.1	3	50.0	102.1	49
1958-59	4	540.0	3	331.0	871.0	38
1959-60	12	2220.5	8	590.0	2810.5	21
1960-61	28	2249.0	11	399.4	2648.4	15
Total	57	5401.6	27	1399.9	6801.5	20.5

Note: (1) Number and amount of initial issues are put against the year during which they were actually made.

(2) Number and amount of further issues have been put against the year in which the issuing companies made their initial issues.

These figures indicate that the percentages of further issues to total capital issues had been fluctuating from year to year. In aggregate, 20.5 per cent of total capital issues were further issues during first four years of companies' existence.

In 1956-57, the impact of unfavourable market conditions restraining the companies from raising adequate

initial capital is not in evidence because reliance on further issues by companies raising their initial capital during this year was the lowest (8 per cent). However, the situation changed in 1957-58 when only limited number of companies (four) were started with inadequate capital. They raised 49 per cent of their total issued capital through further issues when market conditions turned favourable. This tendency continued in 1958-59, though the market conditions were beginning to take a favourable turn. Companies started in 1958-59 raised 38 per cent of their total issued capital through further issues. In 1959-60 and 1960-61, when favourable market conditions were fully set in, companies raised adequate amount of initial capital and their reliance on further issues during first four years after initial issue was considerably reduced.

Thus, it can be concluded that market conditions does affect the percentages of initial and further issues though the impact may work out with some time lag.

Security-wise Classification of Capital Issues

Initial Issues

Table T.3.3. contains figures relating to security-wise break-up of initial issues.

Table T.3.3.: Security-wise Classification of Initial Issues

Year	Number	Amount	(Rs. in lakhs)		
			Securities		
			Ordinary shares	Preference shares	Debentures
1956-57	9	340.0	220.0	113.0	7.0
1957-58	4	52.1	39.3	10.0	2.8
1958-59	4	540.0	530.0	10.0	nil
1959-60	12	2220.5	1742.5	478.0	nil
1960-61	28	2249.0	2018.0	231.0	nil
Total	57	5401.6	4549.8	842.0	9.8

These figures indicate that during this period, ordinary share capital was predominant; small capital was raised through preference shares; and debentures were nil in last three years of the period.

Table T.3.3. is rearranged as Table T.3.4.

Table T.3.4.: Proportions of Different Securities

Year	Securities		
	Ordinary shares	Preference shares	Debentures
1956-57	0.64)) (0.695)	0.34)) (0.265)	0.02)) (0.04)
1957-58	0.75)	0.19)	0.06)
1958-59	0.98	0.02	nil
1959-60	0.78)) (0.84)	0.22)) (0.16)	nil)) (0.00)
1960-61	0.90)	0.10)	nil)
Total	0.84	0.16	0.00

Note: Figures within smaller braces are the averages of proportions.

Table T.3.4. reveals two important points. One, proportion of ordinary share capital was predominant in all the years, but subject to wide year-to-year fluctuations. Two, averages of proportions of different securities differed significantly between two periods: when the capital market was gloomy and when the capital market was favourable. The averages of proportions of ordinary share capital, preference share capital and debenture capital were 0.695, 0.265 and 0.040, respectively, during the years 1956-57 and 1957-58 and 0.84, 0.16 and 0.00, respectively, during 1959-60 and 1960-61. 1958-59 has been treated as transitional year.

Normally a company would like to raise initially the risk capital and avoid fixed-obligation capital.*

During 1956-57 and 1957-58, when the capital market condition was unfavourable, there might have been a feeling that response for risk capital might not be satisfactory. Perhaps investors might prefer fixed income securities (preference shares and debentures). Table T.3.3. does show that the companies started during 1956-57 and 1957-58 had to include preference shares and debentures in their financial plans. In fact, the percentage of these two put together was as high as 30.5. But the companies started during favourable years raised only 16 per cent of their capital through preference shares; and debentures were completely excluded.

Two important conclusions emerge. One, when capital market condition is unfavourable, companies might not get adequate market response for risk capital, therefore, they might raise a larger portion of their initial capital through preference shares and debentures. Two, under favourable market conditions,

*For further discussion on this point see p.34,infra.

when companies anticipate adequate market response, they might raise most of their initial capital through ordinary shares and exclude debentures completely. Capital market condition not only affects the number and amount of issues but also the choice of securities through which capital is raised.

Further Issues

Out of Rs.1399.9 lakhs of further issues, Rs.1195.4 lakhs (85.4 per cent) was raised through ordinary shares, Rs.119.5 lakhs (8.5 per cent) through preference shares and Rs.85 lakhs (6 per cent) through debentures. Even here, preference for risk capital was high, as major portion of capital was raised through ordinary shares. This can be attributed to three reasons. One, most of the companies started during 1956-57 and 1957-58 might still be trying to make-up for sufficient risk capital (through ordinary shares). Two, this study covers only first four years of existence of a company, and the time to introduce and raise proportion of fixed-obligation capital might not have ripened yet. Three, it might be due to general unpopularity of debentures in India.

Therefore, the security pattern of further issues does not show any significant departure from initial issues. It can be expected to change only

when a company has crossed the stage of infancy:

Analysis of Initial Issue of Securities

Ordinary Shares

Ordinary shareholders are entitled to certain rights, e.g., right to dividends, right to voting, pre-emptive rights, etc. These rights cannot be denied; they can only be restricted subject to provisions of articles of association of a company. Besides, all the ordinary shares inflict certain liabilities on shareholders, e.g., the payment of subscription against the purchase price of shares, etc.

As shown in Table T.3.5., companies under study issued ordinary shares of different denominations. Apparently the denomination of Rs.100 was most popular.*

*According to Reserve Bank of India study January 1951 - June 1960, Rs.10 was the most popular denomination of ordinary shares (cf. Reserve Bank of India Bulletin, February 1961, p.171). The difference between two findings might be due to differences in two samples.

Table T.3.5.: Denomination of Ordinary Shares

Year	Total initial issues of ordinary shares	Denominations (Rs.)			
		2	10	50	100
1956-57	9	1	1	1	6
1957-58	4	1	2	nil	1
1958-59	4	nil	1	nil	3
1959-60	12	nil	4	nil	8
1960-61	23	nil	11	nil	17
Total	57	2	19	1	35

Table T.3.5. is rearranged according to size of issues as Table T.3.6. in three size-groups.

Table T.3.6.: Denomination of Ordinary Shares - Size-wise

Size of initial issues	Total initial issues of ordinary shares	Denominations (Rs.)			
		2	10	50	100
Up to Rs. 10 lakhs	7	1	5	nil	1
Rs.11 lakhs - Rs.100 lakhs	37	1	12	1	23
Above Rs.100 lakhs	13	nil	2	nil	11
Total	57	2	19	1	35

Thus, it turns out that denomination of Rs. 10 was most popular in small issues and denomination of

Rs.100 in big issues. The size-effect on denomination of ordinary shares might be due to difficulties experienced by small companies in raising their capital. Big investors are likely to prefer large issues of big companies. Small companies are usually led to attract funds from a wide circle of middle-class public through shares of lower denominations.

Preference Shares

Table T.3.7. contains figures relating to the classification of initial issues of preference shares on the basis of terms and conditions of issues.

Table T.3.7.: Issue of Preference Shares - Terms and Conditions*

Year	Total Issues (Number)	Tax-free		Taxable	
		Dividend Rate	Num-ber	Dividend Rate	Num-ber
1956-57	8	5	-	2	1
1957-58	2	-	-	1	1
1958-59	1	-	-	-	1
1959-60	7	5	1	2	1
1960-61	7	5	-	2	1
Total	25	20	6	2	2

Table T.3.7.: (Continued)

Years	Redeemable (Upto 10 years)	Above 10 to 15 years	Non- re- deem- able	Cumulative	Con- ver- tible	Pre- ferential claiming	Par- ticipat- ing	Denomination (Rs.)		
								10	50	100
1956-57	1	1	4	2	6	-	1	1	1	6
1957-58	2	-	-	-	2	1	-	-	-	2
1958-59	1	-	-	-	1	-	-	-	-	1
1959-60	2	2	3	-	7	-	-	-	-	7
1960-61	1	4	1	1	7	1	-	-	-	7
Total	7	7	8	3	23	2	1	1	1	23

*Figures have been taken from prospectuses and balance-sheets of the companies.

This Table shows that out of twenty five preference issues, twenty issues were tax-free and remaining five issues were taxable. Similarly, out of total preference issues, twenty two were redeemable (seven within ten years, seven within ten to fifteen years and eight after fifteen years) and the remaining three were irredeemable. Again, of the total preference issues, twenty three were cumulative; two had preferential claim with regard to capital return at winding up; only one entitled the shareholders to participate in surplus profits. Out of twenty five issues, twenty three were of Rs.100 denomination*, one each of Rs.50 and Rs.10 denomination.

Year-wise, in 1956-57, all the eight preference issues were tax-free; and the rate of dividend was 6 per cent on five issues, 7 per cent on two issues and 7.5 per cent on one issue. Six issues were redeemable,

*The Reserve Bank of India study on capital issues, 1951-60 also concludes the denomination of Rs.100 on preference shares as the most popular denomination (cf. Reserve Bank of India Bulletin, February 1961. p.171).

mostly after fifteen years, cumulative and of Rs.100 denomination.

In 1957-58, both the preference issues were tax-free, with dividend at 7.5 per cent and 8 per cent rates, redeemable, cumulative and of Rs.100 denomination.

In 1958-59, only one preference issue was made which was taxable, promising dividend at 8 per cent rate, cumulative, redeemable and of Rs.100 denomination.

In 1959-60, out of seven total preference issues, five were tax-free, carrying dividend at 6 per cent, 6.5 per cent and 7 per cent rates and remaining two were taxable with 9 per cent and 9.5 per cent dividend rates. All the issues were redeemable, cumulative and of Rs.100 denomination.

In 1960-61, out of seven issues, five were tax-free, carrying dividend at 6.25 per cent, 7 per cent and 9.3 per cent rates and remaining two were taxable with dividend at 9.3 per cent and 9.5 per cent rates. Of these, six were redeemable; one was convertible into ordinary shares; one was carrying preferential claim with regard to capital return on winding up; and all were of Rs.100 denomination.

Further, figures contained in the Table T.3.7. indicate that the proportion of companies making preference issues was higher during 1956-57 and 1957-58 as compared to 1958-59, 1959-60 and 1960-61. Change in proportions of preference issues during two periods can be attributed to two possible reasons. One, short supply of risk capital under unfavourable market conditions might have compelled the companies to issue preference shares and debentures and approach a wider class of investors. Under such conditions, the more diversified the issue, the better might be the chances of its success. Two, dividend rates for preference shares are likely to be influenced by the prevailing rate of interest in the market. In May 1957, Bank Rate was raised from 3.5 per cent to 4 per cent. With the 'Revival of Monetary Policy', investors anticipated further rise in interest rates. Thus, preference share capital could be raised only at a higher dividend rates. But raising dividend rates means narrowing the leverage advantage. Hence these forces might have resulted in lower proportion of preference issues during last three years of the period.

Further, during 1956-57 and 1957-58, all the preference issues were tax-free but during 1958-59, 1959-60 and 1960-61, taxable issues were also made.

Change in tax feature of preference issues is presumably due to change in taxation policy of the Government. The Finance Act, 1959 introduced the New Scheme of Company Taxation under which the tax liability of shareholders was to have no relation with the tax payable by the company. Under the new scheme, the tax was to be deducted at a flat rate; in assessing the shareholders, any excess that had been deducted at source was to be refunded to the shareholder. This reduced the difference in effective rates of dividends for tax-free and taxable issues. Besides, rates of tax deduction at source were subject to variation from time to time. Because tax-free issues are much affected by these rates, risk to the shareholder as well as the company went up. As a result, tax-free preference issues became less popular during last three years of the period.*

It is also clear from Table T.3.7. that the rates of dividend on preference shares varied from year to year and from issue to issue. Rising trend

*cf., Taraporevala, R.J., The New Scheme of Company Taxation: A Statistical and Economic Analysis of Its Implications and Effects. The Association of Indian Trade and Industry, Bombay. pp. 30-3.

of dividend rates from year to year might be due to rising rates of interest. As far as variation in dividend rates within same year and under similar market conditions is concerned, it might be due to qualitative differences in issues of different companies.

Thus, it can be concluded that: one, the proportion of preference shares was possibly influenced by the condition of capital market and the long-term monetary policy; two, tax feature of preference shares was affected by the taxation policy of the Government; and three, variation in dividend rates can be attributed to the prevailing rates of interest in the market and the quality of issues.

Debentures

Table T.3.8. contains figures relating to terms and conditions of debenture issues.

Table T.3.8.: Issue of Debentures

Year	Num-ber	Tax-free		Taxable			Redemption period: upto 12 years
		Num-ber	Rate of divi- dend	Num-ber	Rate of interest		
			6.5%		6.5% 7%		
1956-57	1	nil	nil	1	nil	1	1
1957-58	2	1	1	1	1	nil	2
1958-59	nil	nil	nil	nil	nil	nil	nil
1959-60	nil	nil	nil	nil	nil	nil	nil
1960-61	nil	nil	nil	nil	nil	nil	nil
Total	3	1	1	2	1	1	3

Out of three issues, one was secured against land and building and the remaining two were secured by (i) first fixed charge on the immovable property, floating charge on other assets and undertaking of the company; (ii) first mortgage of estate and also by floating charge on other assets. All three issues were guaranteed by Managing Agents/Secretaries and Treasurers and/or Managing Director and/or Directors.

It is significant to note that all these debenture issues related to tea and coffee companies. Besides, the size of companies in two issues was below Rs.5 lakhs; in one issue it was Rs.22.5 lakhs.

Under normal conditions a company would not be very keen to issue debentures initially. As the figures in Table T.3.8. show, debentures were issued only under unfavourable market conditions - by a particular type of companies.

Unpopularity of debenture issues at the initial stage can be attributed to five possible reasons. One, generally a company does not hope to earn profits in the first few years of existence. Debentures at this stage might involve a negative leverage. Two, a company cannot postpone the interest payment on debentures; arrears might lead to insolvency. It is likely to raise the capitalization rate. Unless higher capitalization rate is offset by higher rate of earnings, market price of shares might go very low. Three, debentures carry certain constraints in the form of fixed and floating charges which might unduly restrict future borrowing capacity of the company. Four, in the context of low profits or no profits, tax-shield from interest payment would also be negligible. Five, due to general unpopularity of debentures in India, a company is likely to be hesitant to issue debentures.

A company might like to issue debentures initially only when other alternatives are not expected

to fetch adequate capital. In later years, when profitability improves and leverage possibility is significant, a company might like to go in for additional capital through debentures.

Size-wise Classification of Initial Issues

Capital issues are again divided into three size-groups: small, medium and large. Table T.3.9. contains figures relating to the number and amount of issues under different size-groups.

Table T.3.9.: Initial Capital Issues - Size-wise Classification

(Rs. in lakhs)								
Year	Size of issues							
	Upto Rs.10 lakhs		Rs.11 lakhs- Rs.100 lakhs		Above Rs. 100 lakhs		Total	
	Num- ber	Amount	Num- ber	Amount	Num- ber	Amount	Num- ber	Amount
1956-57	1	7.5	8	332.5	nil	nil	9	340.0
1957-58	3	12.1	1	40.0	nil	nil	4	52.1
1958-59	nil	nil	2	75.0	2	465.0	4	540.0
1959-60	nil	nil	6	277.5	6	1943.0	12	2250.5
1960-61	3	30.0	20	879.0	5	1340.0	28	2249.0
Total	7	49.6	37	1604.0	13	3743.0	57	5401.6

Figures appearing in Table T.3.9. indicate that the number and amount of issues varied from year

to year under different size-groups. During 1956-57 and 1957-58, there was no big issue while in 1958-59, 1959-60 and 1960-61, as many as thirteen big issues were made; small issues were negligible during these years.

Table T.3.9. is rearranged as Table T.3.10.

Table T.3.10.: Proportions of Capital Issues Under Different Sizes

Year	Size of issues		
	Small	Medium	Large
1956-57	0.020)) (0.125	0.980)) (0.875	nil)) (0.000
1957-58	0.230)	0.770)	nil)
1958-59	nil	0.140	0.860
1959-60	nil)) (0.005	0.125)) (0.262	0.875)) (0.733
1960-61	0.010)	0.400)	0.590)
Total	0.010	0.295	0.695

Note: Figures within smaller braces are averages of proportions.

Figures in Table T.3.10. indicate that the effect of market condition on the size of issues was considerable. During the unfavourable market period, proportions of small, medium and large issues were: 0.125, 0.875, 0.000, respectively; during favourable

period, they were: 0.005, 0.262 and 0.733, respectively. Probably due to high market risk under unfavourable market conditions, no company floated large issues; during favourable period, as many as eleven large issues were made as against three small issues. Average size of issues during two periods: Rs.3.2 lakhs (unfavourable market period) and Rs.113.1 lakhs (favourable market period) also substantiate the conclusion that the size of issues was influenced by market condition. Besides, large issues contributed more than two thirds of the total initial issues, though their number was only thirteen.

Thus, two conclusions emerge: one, size of capital issues was influenced by the capital market condition, two, large issues contributed major portion of total capital raised through initial issues.

Size-Cum-Security-wise Classification of Initial Issues

Table T.3.11. contains figures relating to size-cum-security-wise classification of initial issues.

Table T.3.11.: Size-Cum-Security-wise Classification of Initial Issues

(Rs. in lakhs)				
Size of Issues	Type of securities			Total
	Ordinary shares	Preference shares	Debentures	
Up to Rs.10 lakhs	44.2	2.6	2.8	49.6
Rs.11 lakhs- Rs.100 lakhs	1370.5	226.5	7.0	1604.0
Above Rs.100 lakhs	3135.1	612.9	nil	3748.0
Total	4549.8	842.0	9.8	5401.6

They show that ordinary shares were predominant in all the size-groups. Further, they indicate that debenture issues were negatively related to size of issues. These conclusions tally with and support the earlier analysis of market climate, i.e., favourable market conditions leading to initial issues of large size, and, large size issues and favourable market conditions being associated with shying away from debentures.

Table T.3.11. is rearranged as Table T.3.12.

Table T.3.12.: Proportions of Securities - Size-Cum-Security-wise

Size of Issues	Type of securities		
	Ordinary shares	Preference shares	Debentures
Up to Rs.10 lakhs	0.890	0.050	0.060
Rs.11 lakhs- Rs.100 lakhs	0.860	0.139	0.001
Above Rs.100 lakhs	0.836	0.164	nil
Total	0.843	0.155	0.002

Table T.3.12. indicates that the proportions of ordinary shares decreased slightly with the increase in size of issues; for preference shares they increased slightly with the increase in size of issues. This relationship is obviously not significant; it might be due to larger capacity of large companies to pick up higher proportions of semi-fixed securities. Consequently, the proportions as between different securities varied slightly for three size-groups of issues. These variations are not significant enough to suggest a relationship between the size of issue and the security mix of initial issues.

Only one conclusion is clearly evident:
ordinary shares were predominant in all the size-
groups.

Participation of Different Agencies in the
Raising of Initial Capital by New Companies

Following five agencies participated in
initial capital issues by new companies:

- (i) Promoters, Directors, Managing Agents,
Signatories to the Memorandum of Association,
etc.;
- (ii) Foreign Collaborators;
- (iii) Financial Institutions;
- (iv) Government; and
- (v) Public.

Table T.3.13. contains figures relating to
the extent of participation by different agencies.

Table T.3.13.: Group-wise Subscription to Initial Capital Issues

(Rs. in lakhs)						
Year	Non-public subscribers				Public	Total
	Promo- oters, etc.	Foreign collabo- rators	Finan- cial institu- tions	Government	sub- scribers	
1956-57	152.9	-	-	-	187.1	340.0
1957-58	15.0	3.0	25.0	-	9.1	52.1
1958-59	60.5	154.5	103.7	-	221.3	540.0
1959-60	720.6	312.1	10.0	-	1177.8	2220.5
1960-61	622.2	267.8	437.0	15.0	907.0	2249.0
Total	1571.2	737.4	575.7	15.0	2502.3	5401.6

Table T.3.13. shows that foreign collaboration was nil in 1956-57 and insignificant in 1957-58. During the five-year period, participation by Government was negligible.

Table T.3.13. is rearranged as Table T.3.14.

Table T.3.14.: Proportions of Participation by Different Agencies

Year	Non-public subscribers				Public subscribers
	Promoters, etc.,	Foreign Collaborators	Financial Institutions	Government	
1956-57	0.45 (0.37)	0.00 (0.03)	0.00 (0.24)	0.00 (0.00)	0.55 (0.36)
1957-58	0.29	0.06	0.43	0.00	0.17
1958-59	0.11	0.29	0.19	0.00	0.40
1959-60	0.31 (0.29)	0.12 (0.12)	0.04 (0.115)	0.00 (0.005)	0.53 (0.46)
1960-61	0.27	0.12	0.19	0.01	0.41
Total	0.29	0.13*	0.10	0.00	0.43

Note: Figures within small braces are averages of proportions.

*Gupta, L.C., 'The Financing Pattern of New Companies in India, 1955-63: An Analysis of Prospectuses', Artha Vijnana, Volume 8, No. 3; September, 1966. This study shows that the extent of foreign participation was 24.2 per cent during 1955-59 and 28.2 per cent during 1960-63. But it includes long-term loans and deferred credit from foreign collaborators which have been excluded in the present study. Hence difference in the percentages of two studies.

Two important points emerge from Table T.3.14. One, the share of non-public participation declined under favourable market conditions, consequently raising the share of public participation. Two, it is significant to note that while non-public participation as a group declined under favourable market conditions, as between its constituents the share of foreign collaborators went-up. These can presumably be due to higher risk under unfavourable market conditions. In the face of such rise in risk, it is likely that the non-public group might be persuaded to subscribe more and only small amount might be solicited from public in the market. Under favourable conditions, risk of market response is not

so high. Therefore, share of non-public (as against public) subscription is likely to fall. Year 1958-59 represents transition from unfavourable to favourable market conditions. In this year, the share of foreign participation was very high presumably because of liberal allocation of foreign exchange.

Thus, it can be concluded that the capital market condition affects the shares of participation by different agencies in capital issues, though the margin of difference is narrow. More unfavourable the capital market condition, the less amount is likely to be offered to public for subscription and more to non-public subscribers.

Participation According to size of Issues

Table T.3.15. contains figures relating to the amounts of initial issue subscriptions by different agencies as classified into three size-groups.

Table T.3.15: Participation According to Size of Initial Issues

Size of issues	(Rs. in lakhs)					Total
	Promoters, etc.	Non-public subscribers Foreign Financial Institutions etc.	Government	Public Subscribers		
Up to Rs.10 lakhs	17.6 (35.4%)	nil	nil	32.0 (64.6%)	49.6 (100)	
Rs.11 lakhs- Rs.100 lakhs	679.5 (42%)	86.8 (5.3%)	120.2 (7.4%)	717.5 (45.3%)	1604.0 (100)	
Above Rs.100 lakhs	874.1 (23.3%)	650.6 (17.3%)	455.5 (12.2%)	1752.8 (46.8%)	3748.0 (100)	
Total	1571.2 (29%)	737.4 (13%)	575.7 (10%)	2502.3 (43%)	5401.6 (100)	

Note: Figures within braces are percentages to totals
of corresponding size-groups.

This Table shows that in case of small size issues, 35.4 per cent of total issued capital was subscribed by promoters, etc. and remaining 64.5 per cent was subscribed by public. In case of medium size issues, 42 per cent of total capital was subscribed by promoters, etc., 5.3 per cent by foreign collaborators, 7.4 per cent by financial institutions and 45.3 per cent by public. In case of large-size issues, 23.8 per cent of total capital was subscribed by promoters, etc., 17.3 per cent by foreign collaborators, 12.2 per cent by financial institutions, 0.4 per cent by Government and 46.8 per cent by public.

In case of small issues participation was limited to public and promoters, etc. presumably because unwillingness of financial institutions and foreign collaborators to participate in these issues.

The percentage share of subscription by foreign collaborators and financial institutions increased with the increase in size of issues. This clearly establishes their preference for large size issues.

Thus, the extent of participation by financial institutions and foreign collaborators was larger on large issues. Percentage subscription

by promoters, etc. was lower on large issues as compared to medium and small issues. Small companies approached only a limited number of non-public sources for subscription.

Security-wise Participation of Different Agencies in Initial Issues

Table T.3.16. contains figures relating to security-wise participation by different agencies in initial issues.

Table T.3.16.: Security-wise Participation of Different Agencies in Initial Issue Subscriptions

(Rs. in lakhs)				
Subscribers	Securities			Total
	Ordinary shares	Preference shares	Debentures	
Promoters, etc.	1509.8 (33%)	61.4 (7%)	nil	1571.2
Foreign collaborators	727.4 (16%)	10.0 (1%)	nil	737.4
Financial institutions	457.0 (10%)	118.7 (14%)	nil	575.0
Government	15.0 (1%)	nil	nil	15.0
Public	1840.6 (41%)	651.9 (78%)	9.8 (100%)	2502.3
Total	4549.8 (100)	842.0 (100)	9.8 (100)	5401.6

Note: Percentages within braces relate to totals of corresponding securities.

Figures appearing in Table T.3.16. indicate that promoters, etc., foreign collaborators and Government subscribed largely to ordinary shares and little to preference shares and debentures. They subscribed 33 per cent, 16 per cent and 1 per cent, respectively, of total ordinary shares; 7 per cent, 1 per cent and zero per cent, respectively, of preference shares and nil to debentures. This indicates that they were mainly interested in the control aspect and had high propensity to bear risk.

On the other hand, financial institutions and public subscribed largely to fixed income securities. Financial institutions are usually not interested in holding ordinary shares for long periods. This is because they are not interested in risk and control. Among public investors, there seems to be two categories: Those who prefer to invest in risk capital and those who prefer to invest in fixed income securities (preference shares and debentures). The contribution of latter category was most significant in debentures and preference shares; they contributed 100 per cent and 78 per cent respectively.

It can be, therefore, concluded that in case of initial issues, promoters, etc., foreign

collaborators and Government preferred ordinary shares. Only financial institutions and public showed interest in preference shares and debentures.

Extent of Participation by Different Agencies in Initial Issues

Table T.3.17. contains figures relating to the extent of participation of different agencies in initial issues.

Table T.3.17.: Extent of Participation by Different Agencies in Initial Issues

Agencies	Participation in number of issues out of total 57 issues	Extent of participation		
		up to 30 per cent	31 per cent to 50 per cent	Above 50 per cent
Promoters, etc.	55	20	23	12
Foreign Collaborators	14	8	4	2
Financial institutions	15	11	2	2
Government	1	1	nil	nil
Public	56	1	32	23

Note: Extent of participation relates to the amount of capital issued.

Table T.3.17. shows that promoters, etc. and public participated in almost all the issues; foreign

collaborators, financial institutions and Government participated in only a limited number of issues. Further, the extent of participation was higher in case of promoters, etc. and public as compared to other agencies. Public contributed the largest percentage of total issued capital. In fifty six out of fifty seven issues, the largest percentage of issued capital was raised from this group.

Participation of Different Agencies in the Raising of Further Capital by New Companies

Table T.3.18. contains figures relating to the extent of participation by different agencies in further issues by new companies.

Table T.3.18.: Subscribers to Further Issues

(Rs. in lakhs)				
Subscribers	Securities			Total
	Ordinary	Preference	Debentures	
Existing shareholders	324.4 (70%)	2.5 (2%)	nil	326.9 (59%)
Foreign collaborators	238.5 (19%)	5.0 (4%)	nil	243.5 (17%)
Financial institutions	16.0 (1%)	nil	85.0 (100%)	101.0 (7%)
Public	126.5 (10%)	102.0 (94%)	nil	228.5 (16%)
Total	1195.4 (100)	119.5 (100)	85.0 (100)	1399.5 (100)

Note: Figures within braces are the percentages of totals of corresponding securities.

These figures indicate that 59 per cent of total further capital was subscribed by existing shareholders, 17 per cent by foreign collaborators, 7 per cent by financial institutions and 16 per cent by public. Security-wise, 70 per cent of total ordinary share issues were subscribed by existing shareholders, 19 per cent by foreign collaborators, 1 per cent by financial institutions and 10 per cent by public. In case of preference issues, existing shareholders and foreign collaborators subscribed 2 per cent and 4 per cent respectively, and public subscribed remaining 94 per cent. Debentures were subscribed by financial institutions.

This analysis leads to two important conclusions. One, most of the further ordinary share issues were subscribed by existing shareholders. Two, further preference issues were mainly subscribed by public. The first tendency might be due to pre-emptive rights to ordinary shareholders that they subscribed 70 per cent of further ordinary share issues. Indian Companies Act, 1956 lays down

that unless otherwise provided in the articles of the company, existing shareholders will have first preference on subsequent ordinary share issues. Regarding the second tendency, the absence of pre-emptive rights on further preference issues might be the possible reason for such a low participation by existing shareholders on these issues.

Underwriting of Initial Capital Issues

Table T.3.19. contains figures relating to the underwriting of initial capital issues of new companies.

These figures show that out of fifty seven total issues amounting to Rs.5426.6 lakhs, twenty seven issues amounting to Rs.3598.4 lakhs involved underwriting. The amount of issues underwritten was Rs.1791.3 lakhs. Again, out of Rs.2523.3 lakhs of issues offered to public, Rs.1538.0 lakhs of capital was underwritten, and out of Rs.2903.3 lakhs of non-public issues, capital amounting to Rs.253.3 lakhs was underwritten.

Table T.3.19: Underwriting of Initial Capital Issues

Years	(Rs. in lakhs)												
	Issue through prospectus						Of which						
	Amount of issues			Net amount offered to public			Amount of issues			Of which			
	Num- ber	Ordy.	Deb. Total	Ordy.	Pref.	Deb. Total	Num- ber	Ordy.	Deb. Total	Num- ber	Ordy.	Pref. Total	
1956-57	9	220.0	113.0	7.0	340.0	93.0	37.1	7.0	137.1	2	80.0	60.0	140.0
1957-58	4	39.3	10.0	2.8	52.1	6.3	nil	2.8	9.1	3	34.2	10.0	44.2
1958-59	4	530.0	10.0	nil	540.0	215.0	6.3	nil	221.3	2	165.0	nil	165.0
1959-60	12	1742.5	478.0	nil	2220.5	734.7	443.1	nil	1177.8	7	1309.1	425.0	1734.1
1960-61	23	2018.0	231.0	nil	2249.0	791.6	115.4	nil	907.0	13	1300.6	214.5	1515.1
Total	57	4549.8	842.0	9.8	5401.6	1840.6	651.9	9.8	2502.3	27	2333.9	709.5	3598.4

Table T.3.19. is rearranged as Tables T.3.20. and T.3.21. below.

Table T.3.20.: Underwriting of Total Issues, Non-Public Issues and Public Issues

(Proportions)

Year	Total issues	Non-Public issues	Public issues
1956-57	0.20	0.00	0.36
1957-58	0.50	0.50	0.42
1958-59	0.10	0.00	0.25
1959-60	0.36	0.00	0.67
1960-61	0.37	0.17	0.67
Total	0.33	0.09	0.61

Table T.3.21.: Underwriting of Total Issues, Non-Public Issues and Public Issues - Security-wise

(Proportions)

Securities	Total issues	Non-Public issues	Public issues
Ordinary Shares	0.25	0.05	0.60
Preference Shares	0.76	0.59	0.30
Debentures	0.00	0.00	0.00
Total	0.33	0.09	0.61

Table T.3.20. shows that 61 per cent of public issues (against 9 per cent of non-public issues) was underwritten. Year 1957-58 was the exceptional year because in this year 42 per cent of public issues (against 50 per cent of non-public issues) were underwritten. If debentures are excluded from total issues, the percentage goes up to 60.

Ordinarily for that part of issues which is privately placed (to promoters, etc., financial institutions and foreign collaborators) underwriting might not be necessary. But for that part of issues which is offered to public underwriting might be necessary because of high market risk involved on this part of issues.

Condition of the capital market also affects the role of underwriting. Under unfavourable market conditions when risk is high, higher percentages of capital issues are likely to be underwritten. It is evident from Table 7.3.20. that during 1957-58 when the market conditions were most unfavourable, as much as 42 per cent amount of public issues and 50 per cent of non-public issues were underwritten. In other years of the period, the percentages of underwriting were not so high particularly in case of non public issues. Despite favourable market

conditions in later two years of the period, higher percentages of amounts of public issues were underwritten. This might be due to increased underwriting facilities in later years and the inclusion of debenturs (not underwritten) in earlier years of the period.

Table T.3.21. shows the proportions of different securities underwritten. In case of ordinary shares, 5 per cent of issued amount to non-public group and 60 per cent of issued amount to public group were underwritten. In case of preference shares the percentages were 59 and 80 respectively. Debentures were not underwritten at all. The reason for these differences might be that major portion of preference shares and small portion of ordinary shares were offered to public (cf. Table T.3.16.). This caused change in reliance on underwriting for two types of securities. Debentures were issued only by a limited number of companies and their marketability was probably considered not to carry high risk presumably because they were issued by companies run by managing agents. However, taking into consideration the limited number of debenture issues for small amounts more detailed analysis relating to them is not possible.

Three conclusions emerge from this analysis. One, underwriting activity is influenced by market risk. It goes up on that part of issues which is offered to public (being considered more risky as against non-public issues). Two, the role of underwriting activity goes up under unfavourable market conditions. Three, irrespective of market conditions or the type of source (public or non-public) there are many companies which float initial issues without any underwriting while there are a few companies whose cent per cent issued capital is underwritten. We do not have sufficient evidence to suggest why it happens this way.

Underwriting Commission on Initial Issues

Table T.3.22. contains figures relating to the rates of underwriting commission paid by new companies on initial issues.

Table T.3.22.: Rates of Underwriting Commission

(In percentages)				
Year	Range of rates		Modal rate	
	Ordinary shares	Preference shares	Ordinary shares	Preference shares
1956-57	2.0	2.0	2.0	2.0
1957-58	2.5	2.5	2.5	2.5
1958-59	1.0 to 2.5	nil	2.0	nil
1959-60	1.0 to 2.5	2.0 to 2.5	2.0	2.5
1960-61	1.5 to 2.5	2.5	2.5	2.5
Total	1.0 to 2.5	2.0 to 2.5	2.5	2.5

These figures show that the rates of underwriting commission varied from year to year. During 1956-57, and 1957-58, lowest rate of underwriting cost on ordinary shares was 2 per cent against 1 per cent during 1958-59, 1959-60 and 1960-61. In first two years, higher percentage cost might be due to unfavourable market conditions and inadequate underwriting facilities. Besides, in certain cases, the rate of underwriting commission on ordinary shares was lower as compared to preference shares. Presumably this might be due to narrower market for preference shares.

Size-wise Classification of Issues Underwritten

Table 7.3.23. contains figures relating to the pattern of underwriting and the size of initial issues.

These figures show that as the size of issues increased, larger percentage of capital issued was underwritten. In small issues 9 per cent of total issued capital was underwritten. For medium and large issues, the percentages were 30 and 35 respectively. Besides, only two out of seven (29 per cent) issues in 'small' group were underwritten whereas sixteen out of thirty seven (43 per cent) in 'medium' group and nine out of thirteen (69 per cent) in 'large' group were underwritten. Thus, size of issues and percentage of total amount of issues underwritten are positively correlated ($r=+0.755$).

This positive relationship between size of issues and underwriting activity can be attributed to three possible reasons. One, large issues involving larger amounts of capital to be raised are more risky. Two, these issues are more attractive to underwriters. Three, average underwriting cost on large issues is usually lower.

Table T.3.23.: (Continued)

Size of issues	Underwriting commission			
	Range of Rates		Average (Mode)	
	Ordinary shares	Preference shares	Ordinary shares	Preference shares
Up to Rs.10 lakhs	2.5%	nil	2.5%	nil
Rs.11 lakhs to Rs.100 lakhs	1 - 2.5%	2 - 2.5%	2.5%	2.5%
Above Rs.100 lakhs	1 - 2.5%	2 - 2.5%	2%	2.5%
Total	1 - 2.5%	2 - 2.5%	2.5%	2.5%

Note: 1. Figures have been taken from prospectuses of new companies.

2. In ordinary issues, the rate 2.5 per cent was applicable in 12 cases out of total 25, and in preference issues, it was applicable in 9 cases out of total 13.

Table T.3.23. also indicates that large issues were underwritten at lower cost as compared to medium and small size issues. The range of cost was: ordinary issues were underwritten at 1.5 per cent in case of small size issues, and 1 per cent to 2.5 per cent in case of medium and large size issues. For preference shares also, the range of cost on medium and small size issues was the same. The modal underwriting cost for ordinary shares was: 2 per cent in case of large size issues and 2.5 per cent in case of small and medium size issues. Large size issues were underwritten at lower cost presumably because underwriters found them more economical and less risky.

It can, therefore, be concluded that underwriting activity is positively correlated ($r = + 0.755$) and the underwriting cost is negatively correlated ($r = - 0.946$) with the size of issues. Larger the size of issue, the higher the percentage of capital underwritten and lower the cost of underwriting and vice versa.

Institutional Participation in Underwriting of Initial Issues

Table T.3.24. contains figures relating to the participation of different institutions in underwriting activity.

Table T.3.24.: Institutional Participation in Underwriting of Initial Issues

Year	(Rs. in lakhs)						Total
	ICICI	IFC	LIC	Different Institutions Banks	Investment Firms of Companies Brokers, etc.		
1956-57	7.0 (10)	nil	nil	nil	60.0 (90)		67.0 (100)
1957-58	nil	nil	nil	1.2 (5)	25.0 (95)		26.2 (100)
1958-59	nil	nil	nil	10.0 (13)	40.0 (72)	5.5 (10)	55.5 (100)
1959-60	130.0 (16)	38.0 (5)	85.0 (11)	235.0 (29.5)	235.2 (29.5)	71.6 (9)	794.8 (100)
1960-61	54.0 (6)	140.0 (17)	151.0 (13)	143.0 (17)	185.0 (22)	169.3 (20)	847.3 (100)
Total	191.0 (11)	178.0 (10)	236.0 (13)	394.2 (22)	460.2 (26)	331.9 (18)	1791.3 (100)

Note: Figures within braces indicate the percentages of totals of corresponding years.

These figures indicate that during 1956-57 and 1957-58 participation of different institutions, such as the Industrial credit and Investment Corporation of India (ICICI), the Industrial Finance Corporation (IFC), the Life Insurance Corporation of India (LIC), commercial banks and investment companies in underwriting activity was negligible. Most of the underwriting was done by firms of brokers, etc. However, in later three years of the period, the position got reversed. The ICICI, IFC, LIC, commercial banks and investment companies played an increasingly important role in underwriting activity and the role of firms of brokers, etc. declined comparatively.

This change during the period can be attributed to two possible reasons. One, in later years many large size issues (thirteen) were floated. This might have raised the need of underwriting. Resources of firms of brokers, etc. might have been insufficient to meet the increased demand for underwriting. Consequently, other agencies got a chance to come up and enter into the field of underwriting of capital issues. Two, in order to accelerate industrialization and foster the capital market, various agencies which were hitherto shying away entered seriously into the business of helping the industry to raise risk capital. The role of commercial banks

has been notable in this connection. In 1957-58, they underwrote issues worth Rs.1.2 lakhs only; in 1959-60 this figure went up to Rs. 235.0 lakhs.

Besides, the trend towards joint participation in underwriting activity is significant. In total, eleven out of twenty seven (41 per cent) issues were jointly underwritten. In first three years of the period, no issue was underwritten jointly.

Because of limitation of resources and unwillingness on the part of a single agency to assume large risk, joint participation came in vogue in large issues in last two years of the period. For instance, in case of Hindustan Aluminium, which raised initial capital worth Rs.250 lakhs, ICICI, IFC, commercial banks and investment companies jointly participated in underwriting the issue.

This change in underwriting activity is significant because it is likely to stimulate the raising of initial capital in the Indian capital market.

CHAPTER FOUR

Floataction Cost of New Issues

For the purpose of the present chapter following data limitations are noteworthy.

One, the entire amount of preliminary expenses, where they were not separated from capital issue expenses, have been regarded capital issue expenses. This is not likely to seriously affect the conclusions because such cases are few and the preliminary expenses as percentage of total issue expenses are not very high.

Two, floatation costs have been related to total amount of capital issued. This had to be done because the companies covered in this study did not adopt uniform policy with regard to distribution of floatation cost separately over two parts of capital issues: capital issue involving floatation cost and capital issue not involving floatation cost.

Three, in the absence of adequate data, it has not been possible to allocate floatation costs over different securities for which they were incurred.*

*cf., Henderson, R.F. The New Issue Market and the Finance of Industry. Cambridge: Bows and Bows, 1951. Chapter IV. pp. 87-90.

Floatation Cost on Initial Issues

Table T.4.1. contains figures relating to the floatation cost of fifty seven initial issues.

Table T.4.1.: Floatation Cost of Initial Issues

Year	(Rs. in lakhs)					
	Initial issues		Average size of issues	Floatation Cost		
	Num-ber	Amount		Num-ber	Amount	Mean of percentages
1956-57	9	340.0	37.8	9	6.54	1.9%
1957-58	4	52.1	13.0	4	3.79	8.4
1958-59	4	540.0	135.0	4	7.92	1.6
1959-60	12	2220.5	185.0	12	55.38	3.6
1960-61	28	2249.0	80.0	28	66.31	3.4
Total	57	5401.6	95.4	57	139.94	3.9

Fluctuations in floatation cost from year to year as appearing in Table T.4.1. are graphed in Figure F.4.1. and a trend line ($y = 3.78 - 0.18 x$) has been fitted.

Figure F.4.1: Floatation Cost of Initial Issues

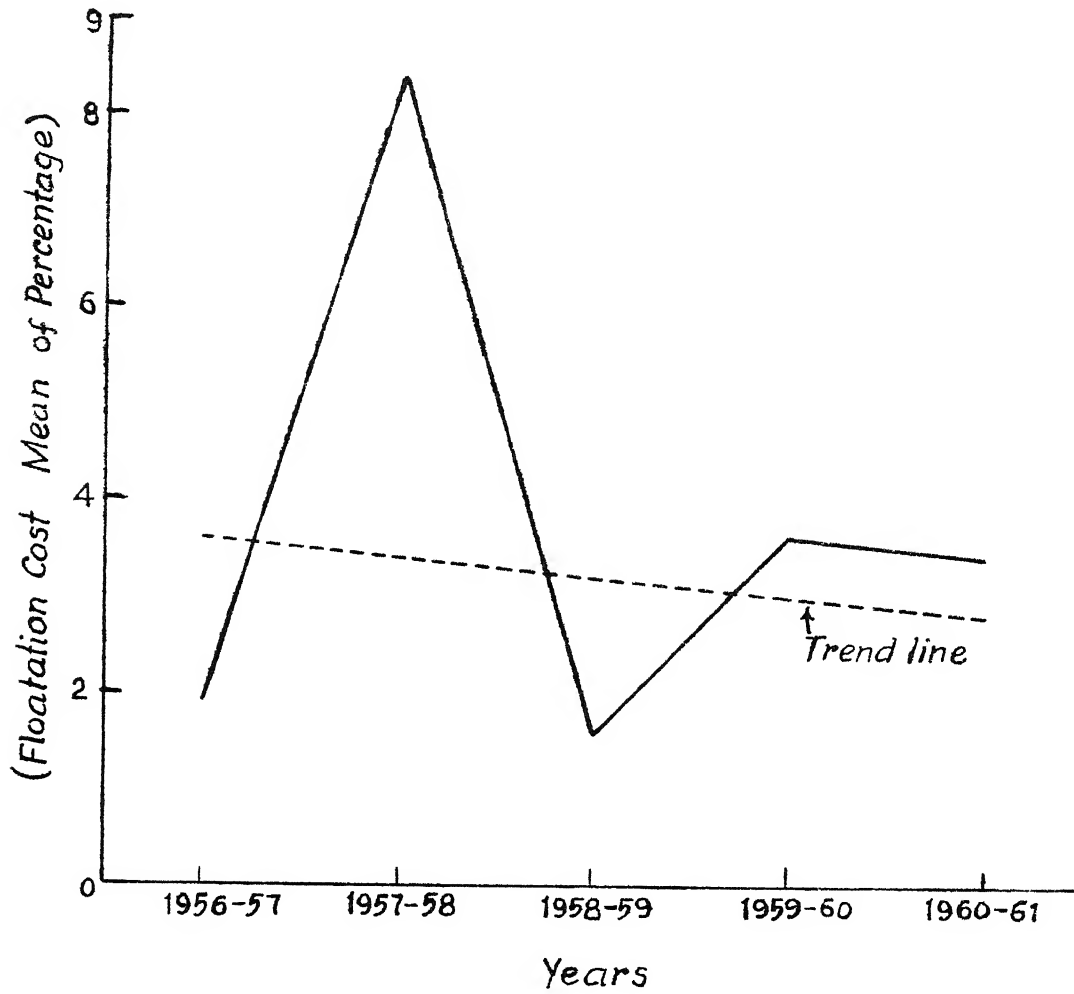


Table T.4.1. and Figure F.4.1. show that around the mean percentage cost, there are significant year to year variations in floatation cost. The extent of variability is shown in Table T.4.2.

Table T.4.2.: Variability in Floatation Cost

Year	Num- ber	Mean of percen- tages of annual floatation cost	Range of cost during the year	Number of issues with percentage floatation cost		
				Up to 3%	3.1% to 6%	Above 6%
1956-57	9	1.9%	0.8 - 3.2%	8	1	nil
1957-58	4	8.4	7.0 - 12.4	nil	nil	4
1958-59	4	1.6	1.1 - 2.5	4	nil	nil
1959-60	12	3.6	0.2 - 11.6	8	2	2
1960-61	28	3.4	1.1 - 5.9	12	16	nil
Total	57	3.9	0.2 - 12.4	32	19	6

These figures in Table T.4.2. show that percentage floatation cost varied from year to year. Years 1957-58 and 1958-59 are worth noting. In 1957-58 the floatation cost was above 6 per cent of issued amount; in 1958-59, it did not touch even 3 per cent. In remaining three years of the period, floatation costs were distributed more widely. However, Figure F.4.1. shows a slowly declining trend.

The variation in floatation cost can be attributed to condition of capital market, reputation of promoters, type of industry - traditional or new, size of issues, etc. But except the size of issue, effects of other factors are not possible to measure.

Floatation cost can be broken into two parts: some items, e.g., underwriting commission and brokerage, are likely to vary directly with the size of issues; other items, e.g., expenses relating to preparation and issue of prospectuses, fees to experts and legal advisors, etc., are not likely to vary directly with the size of issues. However on large size issues, the second category of costs would be spread over a bigger amount making the percentage impact smaller, and vice versa.

Taking the year 1957-58 as a singular instance, during this year the average size of issues was smallest and percentage floatation cost the highest. Is it that to some extent the cost of floatation and the size of issues are related to each other? We, therefore, take here the hypothesis: the cost of floatation of securities is influenced by the size of issues and the percentage floatation cost declines with the increase in size of issues.

Table T.4.3. contains figures relating to floatation cost classified under 'small', 'medium' and 'large' size issues.

Table T.4.3.: Floatation Cost According to Size of Issues

Sizes	(Rs. in lakhs)			
	Initial issues		Floatation cost	
	Num-ber	Amount	Amount	Mean of percentages
Up to Rs.10 lakhs	7	49.6	2.45	6.0%
Rs.11 lakhs to Rs.100 lakhs	37	1629.0	48.81	3.2
Above Rs.100 lakhs	13	3748.0	88.68	2.4
Total	57	5426.6	139.94	3.9

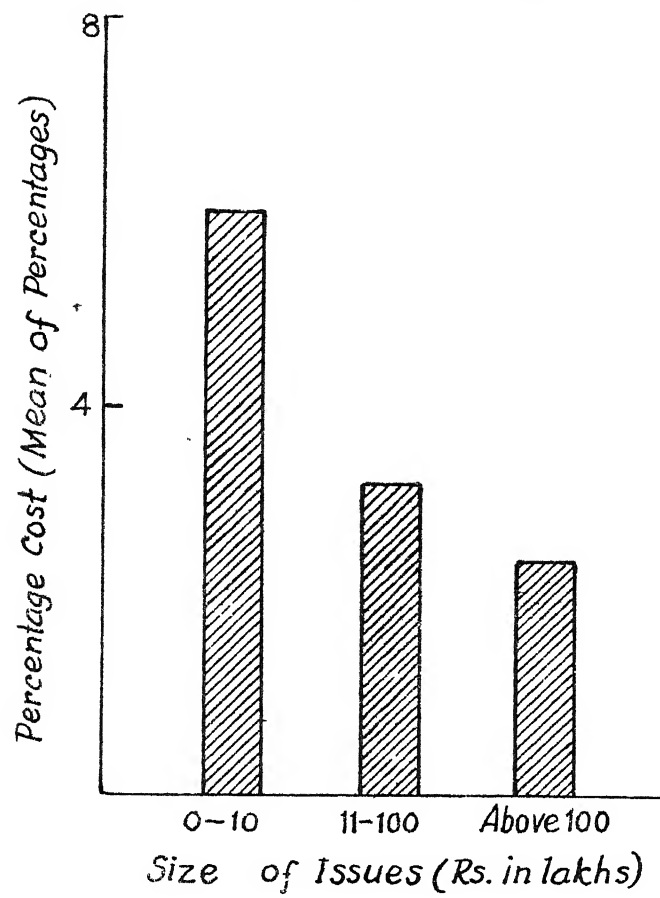
This Table shows that the percentage floatation cost declined with the increase in size of issues.** This relationship is more clearly witnessed in Figure F.4.2.

* cf. Table T.4.4., infra.

** Mulky has also reached to similar conclusion.

cf. Mulky, M.A. The New Capital Issue Market in India. Bombay: Popular Book Depot, 1947. p.82.

Figure E.4.1: Floatation Cost According to
Size of Issues



The bars as appearing in Figure F.4.2 for small, medium and large size issues indicate that on small size issues the floatation cost was highest, followed by medium and large size issues.

It is not that issues under the same size involved equal percentage cost. Table T.4.4. indicates that percentage floatation cost varied not only between two size-groups but also within the same size-group.

Table T.4.4.: Variability in Floatation Cost According to Size of Issues

Sizes	Number	Mean of percentages of annual floatation cost.	Range of percentage costs	Number of Issues with percentage floatation cost		
				Up to 3%	3.1% to 6%	Above 6%
Up to Rs.10 lakhs	7	6.0%	2.5 to 12.4%	1	3	3
Rs.11 lakhs to Rs.100 lakhs	37	3.2	0.2 to 11.6	20	14	3
Above Rs.100 lakhs	13	2.4	1.1 to 3.5	11	2	nil
Total	57	3.9	0.2 to 12.4	32	19	6

Tables T.4.3. and T.4.4. give negative relationship between percentage cost and the size of issues. Taking size as independent variable and percentage floatation cost as dependent variable, we get:

$$r = - 0.12$$

for fifty seven individual issues.

Applying Student 't' test, we find:

$$t = \frac{r \sqrt{N - 2}}{\sqrt{1 - r^2}}$$

Where;

r = coefficient of correlation between size of issues and floatation cost and N = number of issues under study.

Substituting the values in the above formula,

$$\begin{aligned} t &= \frac{- 0.12/\sqrt{57 - 2}}{\sqrt{1 - 0.0144}} \\ &= - 0.9 \end{aligned}$$

The tabular value of 't' for 55 degrees of freedom at 5% level of significance is 1.98. The calculated value of 't' being much less than the expected value, the correlation between size and

percentage floatation cost is, therefore, insignificant. Thus our hypothesis that the percentage cost is influenced by size of issues stands rejected.

It can, therefore, be concluded that the fluctuations in floatation cost from year to year and from issue to issue are not explained by size factor. It might have been caused by other factors: condition of capital market, nature of industry, type of management, etc.

Floatation Cost of Further Issues

Table T.4.5. contains figures relating to the floatation cost incurred by twenty seven new companies for further issues.

Table T.4.5.: Floatation Cost on Further Issues

(Rs. in lakhs)		
Amount of issue	Floatation cost	Cost as percentage of issued amount
1399.9	5.90	0.4%

Figures in Table T.4.5. indicate that the mean percentage cost of further issues was 0.4 per

cent. This is a very low figure compared to mean percentage floatation cost on initial issues (3.9 per cent). Further issues involved lower cost presumably because of three reasons. One, unlike initial issues, it might not be necessary for the companies making further issues to offer a certain percentage (49 per cent) of issued capital to public in order to avail listing facilities (under rule 19 (2) of the Securities Contract (Regulation) Rules, 1957). Consequently, offer of ordinary shares to public might be nominal.¹ This could have the effect of reducing the risk of marketability and consequently the underwriting cost. Two, by the time a company makes further issues, it might get on its own feet and might be able to issue securities independently and save brokerage cost. Three, floatation cost on further issues would usually be limited only to underwriting and brokerage costs; other capital issue expenses might not be significant

¹cf. Table T.3.18., supra.

Classification of Floatation Cost on
Initial Issues

Table T.4.6. contains figures relating to underwriting and brokerage costs and other capital issue expenses on initial issues.

Table T.4.6.: Classification of Floatation Cost on Initial Issues

Year	(Rs. in lakhs)						
	Total cost	Underwriting cost		Brokerage cost	Other capital issue expenses		As per cent of total cost
		Amount	per cent of total cost		Amount	As per cent of total cost	
1956-57	6.54	1.34	20%	3.06	47%	2.14	33%
1957-58	3.79	0.59	16	0.47	12	2.73	72
1958-59	7.92	1.10	14	3.63	46	3.19	40
1959-60	55.38	16.62	30	10.62	35	19.14	35
1960-61	66.31	18.07	27	21.51	32	26.73	41
Total	139.94	37.72	27	48.29	34	53.93	39

Figures in Table T.4.6. indicate that the percentages of different costs in total cost fluctuated from year to year. Year 1957-58 may be taken as an exceptional year when the percentage of other capital issue expenses was much higher than the add up of underwriting and brokerage costs. This might be due to the fact that during this year the size of issues was small and, therefore, the proportion of invariable expenses was larger.*

Table T.4.6. is rearranged according to size of issues as Table T.4.7.

*cf. Table T.4.1., supra.

Table T.4.7.: Classification of Floatation Cost According to Size of Issues

Sizes	(Rs. in lakhs)						
	Total cost	Underwriting cost		Brokerage cost		Other capital issue expenses	
		Amount	As per cent of total cost	Amount	As per cent of total cost	Amount	As per cent of total cost
up to Rs.10 lakhs	2.45	0.04	2%	0.66	27%	1.75	71%
Rs.11 lakhs to Rs.100 lakhs	48.81	9.68	20	13.09	27	26.04	53
Above Rs.100 lakhs	88.68	28.00	34	34.54	39	26.14	27
Total	139.94	37.72	27	48.29	34	53.93	39

Table T.4.7. shows that percentages of underwriting and brokerage costs went up and of other capital issue expenses went down with the increase in size of issues. Such relationship between the size of issues and underwriting cost and brokerage cost on the one hand, and, size of issues and other capital issue expenses on the other, can be attributed to two possible reasons. One, on large size issues the risk of floatation might be higher. Therefore, higher percentage of issued capital might be underwritten, and thus increasing the share of underwriting cost (against other capital issue expenses which might not vary proportionately with the size of issues). For large size companies the services of brokers are likely to be indispensable; but small size companies might sell securities independently. Two, small size issues relate mostly to the period when underwriting was not much in vogue. Therefore, the percentage share of underwriting cost was smaller in case of small size issues.

This leads to one important conclusion: the shares of underwriting and brokerage costs in total cost increase with the increase in size of issues and

*cf. T.3.19., supra.

the share of other capital issue expenses decreases with the increase in size of issues.

Classification of Floatation Cost on
Further Issues

Table T.4.8. contains figures relating to underwriting cost, brokerage cost and other capital issue expenses on further issues.

Table T.4.8.: Classification of Floatation Cost on
Further Issues

(Rs. in lakhs)						
Total cost	Underwriting cost		Brokerage cost		Other capital issue expenses	
	As per		As per		As per	
	Amount		Amount		Amount	
	cent of	total	cent of	total	cent of	total
	cost	cost	cost	cost	cost	cost
5.90	1.21	21%	4.16	70%	0.53	9%

Table T.4.8. indicates that the share of other capital issue expenses in total floatation cost as against underwriting and brokerage costs was very low. It might be because further issues unlike initial issues involve less items of other costs.

A large percentage of further issues is offered to existing shareholders under the pre-emptive

rights.* This reduces the underwriting of further issues. Therefore, the share of underwriting cost in total floatation cost of further issues declines.

The largest percentage for brokerage cost, however, does not imply that higher percentage of issue was made through the brokers. In fact, in this case, only eight out of twenty seven companies paid brokerage on further issues as against fifty four out of fifty seven companies in case of initial issues. The share of brokerage cost went up because of relative decline in the shares of underwriting cost and other capital issue expenses.

The floatation cost data presented in this chapter shows that the average floatation cost for new companies was 3.9 per cent on initial issues and 0.4 per cent on further issues. These are very low figures. They reflect the underdeveloped character of Indian capital market.**

*cf. Table T.3.18., supra.

**Studies made in the U.K. and the U.S.A. show comparatively much high percentages of floatation costs. Vide, Henderson, R.F., The New Issue Market and the Finance of Industry, Cambridge: Bows and Bows, 1951, and, Securities and Exchange Commission, Cost of Floatation of Securities, 1951-55, Washington, D.C.: U.S. Government Printing Office, June 1955.

Part Two

CHAPTER FIVE

Essentials of Fund Flow Analysis

The term 'funds' is most commonly defined as excess of current assets over current liabilities. It is in this sense that funds are regarded the same as working capital. All changes in assets and liabilities during a certain period constitute fund inflows and outflows.

In a narrow sense funds are defined as cash flows. In order to arrive at the broader fund flow concept, the time period involved is critical. If, for instance, funds are ascertained with a view to meet certain claims within a very short period of some days or weeks, the projected change in the cash balance is more meaningful than a projection of either changes in working capital or changes in current assets. On the other hand, the long-term debt paying capacity within a period of some months or few years of a business enterprise can be ascertained only by reckoning changes in working capital. In this case, near cash items are treated on par with cash items and are added together.*

*cf. Jaedicke, Robert K. and Sprouse, Robert T. Accounting Flows: Income, Funds, and Cash. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1965. Ch.5. pp. 78f.

Total funds available with a business at certain period are termed as 'pool of funds'. Funds flow into and flow-out from this pool. The size of fund flows into and out of the pool depends upon the changes in assets and liabilities of the business firm.

Sources and Uses of Funds

The operation of a business enterprise involves continuous fund flows. Funds are raised from certain sources and in turn are put to certain uses. Maximization of profits is sought in terms of raising funds from cheapest sources and putting them to most profitable uses. The choice of sources and uses will also affect the solvency position of a business. Therefore, choice of sources and uses of funds is also important from liquidity point of view.

Funds may be built up either through operations (retained earnings), or, they may be raised through security issues or through borrowings. They may be used in acquiring certain assets or building up cash balance or in repayment of certain liabilities. Thus, items other than current assets and current liabilities can also be fund items. In fact, all sources and uses of funds are determined by changes

in different assets and liabilities of a business during a period of time interval.*

Sources of funds may be grouped under following heads:

- (1) Increase in liabilities;
- (2) Increase in net worth; and
- (3) Decrease in assets.

Uses of funds may also be grouped under following heads:

- (1) Increase in assets;
- (2) Decrease in liabilities; and
- (3) Decrease in net worth

Increase or Decrease in Liabilities: Funds may be raised by contracting long-term and short-term loans. Besides, items such as reserves for tax liability or

*This relationship can be explained in symbols as follows:

$$A = L + NW$$

$$FA + CA = (FL + NW) + CL$$

$$CA - CL = (FL + NW) - FA$$

$$\angle (CA - CL) = \angle (FL + NW) - FA); \text{ where}$$

A= Assets; FA = Fixed Assets; L = Liabilities;

NW = Net Worth; FL = Fixed Liabilities; and

CL = Current liabilities.

other current liabilities also constitute sources of funds. On the other hand, decrease in liabilities implies that certain loans have been repaid. Repayment of loans is a use of funds.

Increase or Decrease in Net Worth: Issue of shares or retention of earnings are likely to increase net worth and they constitute sources of funds. As against this, refund of share capital (usually preference share capital) or losses in operations amount to uses of funds.

Increase or Decrease in Assets: Buying of different assets involves fund outflows or the use of funds; the sale of an asset, on the other hand, becomes a source of funds.

Funds may be used in purchase of inventories, or in extending credit to customers, or accumulating cash balances. On the other hand, if inventories are sold, or outstanding accounts collected, or cash balance is run down, they become sources of funds.

Use of funds in fixed assets is given a separate treatment. In fund flow analysis changes in fixed assets are reckoned in terms of gross values. Depreciation is shown separately as a source of funds.

The provision for depreciation is made in order to serve a specific purpose: adjustment for costs incurred in earlier periods. In a way, it does not involve any fund flow by itself. But since it is debited as cost without involving fund outflow during the period, explicit recognition of this fact is necessary to afford correct fund position of a business.

Further, each use or application of funds must be offset by one or more sources of funds. Thus, the funds for purchase of a new plant may be provided in part by a reduction of the cash account (cash payment) and in part by an increase in debt. Similarly, a given source must have offsetting uses. Funds raised from an issue of capital stock may be committed to increases in the cash account, inventories and machinery or to reductions of current - or long-term liabilities.*

Thus, the relationship between sources and uses of funds may be explained as follows:

*Helfert, Erich A., ed. Techniques of Financial Analysis. Homewood, Illinois: Richard D. Irwin Inc., 1963. Ch.1. p.4.

Sources = Uses

Increases in liabilities and net worth +)	(Increase in assets +
Decrease in assets)	(Decrease in liabilities and net worth
		=	

Fund Flow Statement

Analysis of fund flow implies preparation of fund flow statements. An outsider has access to profit and loss account and balance-sheet of a concern. His approach may be limited only to these two statements. More refined fund flow statement can be prepared internally by the management.

Thus the fund flow statements prepared by an outsider are usually based on profit and loss account and balance-sheet information. With the help of balance-sheets, Statement of Balance-Sheet Changes (also known as 'Where-Got, Where-Gone' Statement) is prepared. This statement incorporates increases and decreases in balance-sheet items as between two balance-sheet dates. A proforma statement of balance-sheet changes is presented below.

Statement of Balance-Sheet Changes

('Where-Got, Where-Gone' Statement)

Amount
(Rs.)

Sources of Funds

Decrease in inventories
Decrease in Government securities
Decrease in miscellaneous investments
Decrease in pre-paid expenses
Increase in accounts payable
Increase in accrued taxes
Increase in ordinary share capital
Increase in retained earnings

Total sources

Uses of Funds

Increase in cash
Increase in marketable securities
Increase in accounts receivable
Increase in long-term debt
Increase in net plant and equipment*

Total Uses

* Some balance-sheets show only net fixed
assets and the provision for depreciation

is contained in a separate statement. It is after proper adjustments that depreciation is regarded as a source of funds and fixed assets are shown at their gross value.

Common Refinements: There are two common refinements which financial analysts make in the flow data of the simple 'where-got, where-gone' statement. In first of these refinements is the individual recognition of profits (or losses) from operations on the one hand and dividends paid on the other. The second refinement is concerned with the idea of showing depreciation as a source of funds based on the argument that profits were understated as a result of the depreciation charge, which is only a book entry causing no funds changes.

Profit and Dividends: Income from operations is one of the most important sources of funds in a business. On the other hand, dividends are an important use. But in balance-sheets, the balance of profits (after deducting dividends) are shown. If the profit balance in the balance-sheet is not adjusted, the outflow of funds in form of dividends is not disclosed. Therefore, the 'where-got,

where-gone' statement should be adjusted with the help of profit and loss account so that it may show profits (before dividends) on the one hand and dividends on the other.

Depreciation as a Source of Funds: Contrasting views are expressed in recognizing the depreciation as a source of funds. Depreciation being a non-cash charge, falsely offsets and reduces the funds flowing from profits. In order to give correct picture of fund flows, depreciation should be added back to profits. Some call depreciation as a source of funds; others say that sales is the only internal source of funds. Whichever interpretation is used, the amount of depreciation charged against operations should be reflected as a fact which is financially significant as long as amount charged as depreciation does not involve outflow of funds as in case of other expense items. Only when this amount is added back to profits reconciliation of profits minus dividends with funds retained in the business is possible.

After adjusting 'where-got, where-gone' statement, fund flow statement is prepared. Fund flow statement may be detailed or short,

depending on the needs of financial analyst.
A proforma statement, which is used in this
study is presented below:

Fund Flow Statement

	Amount (Rs.)
<u>Sources of Funds</u>	
Internal Sources:	
Depreciation	
Development Rebate Reserve	
Reserves, Provisions and Surpluses	
Other Internal Sources	
Total Internal	<hr/>
External Sources:	
Share Issues	
Long-Term Debts	
Short-Term Debts	
Total External	<hr/>
Total Sources	<hr/> <hr/>

	Amount (Rs.)
<u>Uses of Funds</u>	
Current Uses:	
Inventories	
Sundry Debtors	
Cash and Bank Balance	
Other Current Uses	

Total Current	_____
Fixed Assets and Investments	
Other Unclassified Uses	
	=====
Total Uses	=====

Limitations and Importance of Fund Flow
Analysis Based on Balance-sheet Changes

Study of fund flows based only on balance-sheet changes may lead to certain inaccuracies. For instance, decrease in an asset might be due to its being discarded (involving no scrap value), though the change will be regarded as a source of funds. Another most likely source of error, however, is in connection with the changes in surplus. The net result may have been produced by a number of offsetting transactions, some involving and

others not involving fund flows. Unless full details of all such transactions are available, full accuracy is not possible.

However, despite these limitations of balance-sheet changes as the basis of fund flow statements, they serve a useful purpose in financial analysis, particularly when the main purpose is to gain a historical perspective on the financial position of a business. Such perspective is often necessary for judging the soundness of the present financial condition and in appraising the prospects for the future. Clearly, for such a broad objective a very high degree of precision in calculation of fund flows will not be worth the reward.

CHAPTER SIX

Fund Flow Analysis of New Companies

In order to analyse the pattern of fund flows of new companies during first four years of their existence, fund flows related to these companies have been arranged into two parts:

- (1) Fund flows of all the new companies taken together; and
- (2) Fund flows in (a) small size companies (with total gross assets up to Rs.50 lakhs); (b) medium size companies (with total gross assets between Rs.51 lakhs to Rs.500 lakhs); and large size companies (with total gross assets above Rs.500 lakhs).*

*Total gross assets at the end of the fourth year of their existence. Instead of net assets, total gross assets have been taken as the basis of classification. It is mainly because many companies did not depreciate their fixed assets by the end of fourth year. This basis of classification is different from that of the Reserve Bank of India and the Company Law Board which adopt paid-up capital as the basis of classification. Paid-up capital does not correctly reflect the size of companies.

Fund Flows of All New Companies

With the help of Consolidated Balance Sheet and the Statement of Balance-Sheet Changes (as appearing in Appendices A.1. and A.2. respectively), a fund flow statement has been prepared. This is presented in Table T.6.1. which contains figures relating to fund flows in all the new companies during first four years of their existence.

Table T.6.1.: Summarized Fund Flow Statement of All New Companies

		<u>Sources of Funds</u>				Percentages			
		Amount (Rs. in lakhs)				First Second Third Fourth year year year year			
<u>Internal Sources:</u>									
Depreciation	3	26	135	413	0.2	0.8	3.1	11.2	
Development Rebate Reserve	6	14	108	72	0.3	0.4	2.5	1.9	
Reserves, Provisions and Surpluses	19	49	31	202	1.0	1.5	0.7	5.5	
Other Internal Sources	nil	nil	594	46	nil	nil	13.4	1.2	
Total	28	89	868	733	1.5	2.7	19.7	19.8	
<u>External Sources:</u>									
Share Issues	1574	2156	1241	883	85.3	65.1	28.1	24.0	
Long-Term Debts	34	624	1372	914	1.8	18.8	31.1	24.8	
Short-Term Debts	210	444	930	1158	11.4	13.4	21.1	31.4	
Total	1818	3224	3543	2960	98.5	97.3	80.3	80.2	
Total Sources	1846	3313	4411	3693	100	100	100	100	

Table T.6.1.: (Continued)

		<u>Uses of Funds</u>							
		<u>Amount</u> (Rs. in lakhs)				<u>Percentages</u>			
		First year	Second year	Third year	Fourth year	First year	Second year	Third year	Fourth year
Current Assets:									
Inventories	121	278	790	893	6.6	8.4	17.9	24.2	
Sundry Debtors	24	70	92	253	1.3	2.1	2.1	6.7	
Cash and Bank Balances	635	350	nil	210	34.4	10.6	nil	5.7	
Other Current Uses	348	71	14	430	18.3	2.1	0.3	11.7	
Fixed Assets and Investments									
	1128	769	896	1786	61.1	23.2	20.3	43.3	
	623	2470	3364	1655	33.8	74.6	76.3	44.8	
Other Unclassified Uses									
	95	74	151	252	5.1	2.2	3.4	6.9	
Total Uses									
	1846	3313	4411	3693	100	100	100	100	

- Note: (1) Reserves, provisions and surpluses include: credit balance of profit and loss account, capital reserve, general and other reserves and provision for taxation.
- (2) Other internal sources represent decrease in asset items.
- (3) Long-term debts include: debentures, bank mortgages, loans from finance corporations, fixed deposits, loans from Government and other long-term loans.
- (4) Short-term debts include: loans from commercial banks, loans from others, trade creditors and other current liabilities.
- (5) Other unclassified uses include: losses, deferred expenses, repayment of debts, etc.
- (6) Other current uses include: loans and advances and other current assets (viz., marketable securities, etc.).

Sources of Funds

Internal Sources

Internal sources include: (a) depreciation,

(b) development rebate reserve, (c) reserves, provisions and surpluses, and (d) other internal sources.

Table T.6.1. indicates that internal sources showed steady rise during the four-year period. They were: 1.5 per cent, 2.7 per cent, 19.7 per cent and 19.8 per cent respectively during first, second, third and fourth years, of the total sources. These percentages may rise substantially in future, as indicated by more matured companies.*

Depreciation and Development Rebate Reserve: In the first three years, percentages of fund inflows from ~~these~~ two sources as between them were not very different. They were: 0.2 per cent, 0.8 per cent and 3.1 per cent, respectively, of total funds from depreciation, as against 0.3 per cent, 0.4 per cent and 2.5 per cent respectively from development rebate reserve in the corresponding first three years. In the fourth year, however, depreciation contributed

*In 1962-63, 49 per cent of total funds flowed in from internal sources in 1333 more matured companies. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

11.2 per cent of total funds as against 1.9 per cent by development rebate reserve. Sharp rise in percentage of fund inflows from depreciation and decline in percentage of fund inflows from development rebate reserve might be due to differences in nature of two sources. Development rebate reserve is created with a view to benefit from tax relief on plant and machinery bought. This rebate is available only once during the life time of a machine and can be enjoyed within eight years from the date of purchase of machine. On the other hand, provision for depreciation increases with the increase in use of assets and continues over the life of the asset. If depreciation could not be charged because of inadequate profits, the same can be carried forward for indefinite period and can be setoff against future profits.

In the first three years, percentages of fund inflows from depreciation and development rebate reserve are not very much different. This is presumably because assets were acquired during these years and development rebate reserve was created in respect of these assets. But then this phase ended with the third year. After this year, assets began to be used and year to year depreciation

came into prominence. Increasing percentage fund inflows from depreciation might be indicative of their future trend.*

Taking the percentages of two sources together, 0.5 per cent of total fund inflows in the first year, 1.2 per cent in the second year, 5.6 per cent in the third year and 13.1 per cent in the fourth year came from these two sources. As against remaining two items (reserves, provisions and surpluses and other internal sources) of internal sources, they contributed more funds and their percentages showed a sharp rise with the passage of time.

Reserves, Provisions and Surpluses: Percentages of fund inflows from reserves, provisions and surpluses had also shown moderate rise. It contributed 1.0 per cent, 1.5 per cent, 0.7 per cent and 5.5 per cent in the first, second, third and fourth years respectively of total fund inflows.

*In 1962-63, the percentages of fund inflows from depreciation and development rebate reserve were 28 per cent and 8 per cent respectively in 1333 more matured companies. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

Profits may increase gradually with the increase in operations. It is only after a few years that sufficient profits are earned to distribute among shareholders as well as to retain them in the business. During first three years, this source contributed small percentages of funds because profits were either non-existent or low. In the fourth year, however, the percentage of fund inflows from this source increased slightly. It might be due to improvement in profitability of these companies by this time. Thus, during the four-year period which represents the stage of infancy of companies, this item contributed only small percentage funds but at increasing rate. This increase might continue in future to reach the normal as indicated by more matured companies.*

*In case of 1333 more matured companies, the percentage of fund inflows from reserves, provisions and surpluses was 13 in 1962-63. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

Other Internal Sources:* Except in the third year, this item contributed little funds during the period. Fund inflows from this source were limited and irregular because it represents decrease in assets (i.e., converting non-cash items into cash or utilizing existing cash balance) which is not an important and regular feature in the working of a firm. This item contributed 13.4 per cent of total funds in the third year presumably because funds in first two years were not immediately used in buying the operating assets; rather they were kept as idle cash balance. By third year when more funds were needed to make payment for assets bought, existing cash balance was used up. This process gave rise to this internal source: decrease in cash balance was regarded as a

*Stricto sensu, these cannot be described as internal sources in case of new companies as they do not find their origin from sale proceeds. This is because a very significant part of internal sources in case of these new companies flow from the drawing down of current assets which were built up merely to hold liquidity pending payments for fixed assets.

source of funds and increase in assets as a use of funds.*

In the fourth year, this item provided only 1.2 per cent of total funds. In this year, there was no reduction in cash balance or loans and advances. Only 'other current assets' were converted into cash.** Cash balance was not used in this year presumably because it would have run short to endanger solvency, or, needed funds could be raised from sources other than utilizing existing cash balance.

External Sources of Funds

To start with, a company needs large amount of funds to begin its operations. During this period it

*As for assets: while all other assets showed an increase in the third year, the cash balance decreased (cf. Appendix A.2).

**In preparing the fund flow statement, other current assets have been added up with loans and advances and, thus, a separate item of other current uses has been given. Fund flow statement does not reveal this change but the statement of balance-sheet changes shows the decrease in other current assets (cf. Appendix A.2.).

has to construct factory building, acquire plant and machinery, inventory, etc. Since a new company has either no or low profits, funds can flow in only from external sources: by issuing shares or contracting short-term and long-term loans. In the first year, external sources might contribute entire funds but in later years, when the firm can begin to charge depreciation or retain profits, internal sources are likely to emerge and gain prominence. Thus, with the passage of years, the percentage share of external sources is likely to decline. The experience of new companies confirms this hypothesis. In the first year, as much as 98.5 per cent of total funds came from external sources; but in second year, they were 97.3 per cent; in third year, 80.3 per cent; and in fourth year, 80.2 per cent. Thus, during the four-year period, there was a decline of about 19 per cent. External sources might further decline as share of internal sources begins to rise steadily in later years.*

*In 1962-63, 51 per cent of total funds flowed in from external sources in 1333 more matured companies cf. Reserve Bank of India Bulletin, July 1964.

The individual items comprising external sources moved in opposite directions: percentage share of funds from share issues registered a decline; as against this percentage share of funds from short-term and long-term loans registered an increase.

Share Issues: This item contributed 85.3 per cent, 65.1 per cent, 28.1 per cent and 24.0 per cent during first, second, third and fourth years respectively. Clearly these percentages show that there was sharp decline in percentage share of fund inflows from issue of shares during the four-year period.

Fund flow statement of all new companies shows that for first four years, significant percentages of funds flowed in (but with its percentage share declining) from this source. It might not imply that during all the years, companies made further issues and raised substantial funds. In fact, only twenty seven out of fifty seven companies made further issues during first four years and raised only 20.5 per cent of total issued capital.* Large percentages of fund inflows from this source during the four-year period might be due to the fact that initially issued capital

*cf. Table T.3.2., supra.

was called up gradually. It is clear from the fact that out of Rs.5391.8 lakhs of initially issued share capital, only Rs.1574 lakhs were actually raised in first year and the rest in following three years.*

Thus, the fund inflows from share issues might continue to decline sharply in subsequent years, particularly if no further issues are made. But this is an extreme case. Companies make further issues at some time intervals. Of course, their percentage share is not likely to be that high in later years.**

Long-Term Debts: The percentages of long-term loans in total fund inflows were: 1.8 per cent in the first year, 18.8 per cent in the second year, 31.1 per cent in the third year and 24.8 per cent in the fourth year. Thus, by the end of the third year, these percentages increased but in the fourth year, it declined. Absolute figures also indicate the similar tendency.

*cf. Tables T.3.2. and T.6.1., supra.

**In 1333 more matured companies, the percentage of fund inflows from share issues was 8 in 1962-63.
cf. Reserve Bank of India Bulletin, July 1964.
Table 7. p.857.

During first three years, the percentages of fund inflows from long-term loans showed a steady rise. Presumably these years related to construction period when the long-term financing was greatly needed. Taking into consideration the limitations of equity financing and inadequacy of internal sources, long-term loans were the natural choice. But in the fourth year the percentage of fund inflows from this source declined. This is perhaps because by the end of the third year many companies would have crossed construction stage. Therefore, long-term financial requirement was reduced. Besides, fund inflows from internal sources and short-term loans causing decline in percentage share of long-term loans also increased. The percentage fund inflows from long-term loans might decline significantly in future when these companies start retaining sufficient earnings.*

Short-Term Loans: Figures appearing in Table T.6.1. indicate that the percentages of fund inflows from

*In case of 1333 more matured companies, the percentage of fund inflows from long-term loans was 8 in 1962-63. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

short-term loans were: 11.4 per cent in the first year, 13.4 per cent in the second year, 21.1 per cent in the third year and 31.4 per cent in the fourth year.

In the earlier years of the period, the percentages of fund inflows from short-term loans were lower presumably because of two reasons: the need of short-term financing was limited and companies did not have attractive securities to offer to lenders. But later on the situation changed. In the fourth year, the share of short-term loans in total sources rose to 31.4 per cent. This increase was presumably due to increased need of short-term funds and ability of companies to offer good securities to lenders. Particularly trade credits are dependant upon the volume of purchases and reputation of the purchaser. Fund inflows from this source increased significantly in the fourth year when purchases were likely to be large. They might rise further in future years with further increaseⁱⁿ operations.*

*In 1333 more matured companies the percentage of fund flows from short-term loans was 35 in 1962-63. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

From the above analysis, three significant conclusions emerge. One, as between internal and external sources, the percentages of fund inflows from internal sources showed a steady rise and from external sources a steady fall, as the companies passed through the stage of infancy. Two, as between internal sources, percentages of fund inflows from depreciation and reserves, provisions and surpluses increased and from development rebate reserve and other internal sources decreased during the period. Three, as between external sources, the percentages of fund inflows from share issues and long-term loans declined and from short-term loans increased, with the passage of years of infancy.

Uses of Funds

Uses of Funds into Current Assets

Figures contained in Table T.6.1. indicate that the percentages of fund outflows into current assets fluctuated during the four-year period. They show that in the first year 61.1 per cent, in the second year 23.2 per cent, in the third year 20.3 per cent, and in the fourth year 48.3 per cent of total funds

were used into current assets.*

In the first year, the percentage of fund outflows in current assets was high presumably because necessary funds could not be used for acquiring fixed assets. It might be that necessary funds were raised but because of time factor involved in constructing buildings and acquiring machines the companies did not use up that much of funds. High percentages of fund outflows into cash and bank balances (34.4 per cent) and into other current uses (18.8 per cent) leads to the conclusion that funds were willy-nilly diverted to these uses, pending their use for acquiring fixed assets. In the second year, percentage of fund flows into current assets fell sharply. It was because major portion of total funds was used into fixed assets. In the third year, the same tendency persisted and large percentage of total funds was used up into fixed assets. The existing cash balance was drawn down and thus gave rise to fund inflows from other internal sources.

*The percentage of fund outflows into current assets was 45 in 1333 more matured companies in 1962-63.

cf. Reserve Bank of India Bulletin, July 1964.

Table 7. p.857.

In the fourth year, however, percentage of fund outflows into current assets increased. This was presumably because most of the fixed assets were acquired by the end of third year; the problem of working capital came up with the start of operations.

The four items of current uses, viz., inventories, sundry debtors, cash and bank balances and other current uses, fluctuated in different directions during the four-year period.

Inventories: The percentages of fund outflows into inventories during the four-year period were: 6.6 per cent in first year, 8.4 per cent in second year, 17.9 per cent in third year and 24.2 per cent in fourth year. Thus, the percentages of fund outflows into inventories rose steadily during the period. In the first two years, the percentages of fund outflows into this item were low because of the volume of operation. But many companies would have raised production sufficiently by the third or fourth year, with the completion of building and installation of plant and machinery. Inventory being related to inputs, more funds were naturally used for this item in these years. Unlike fixed assets, the requirement of inventories is likely to vary with the volume of

operation. Besides, funds are likely to flow out regularly under this head and at increasing rate.*

Sundry Debtors: The percentages of fund outflows into sundry debtors were: 1.3 per cent in the first year, 2.1 per cent each in the second and third years, and 6.7 per cent in the fourth year. Thus, the percentages for this item showed steady rise during the four-year period.

Sundry debtors are associated with sales, which in their turn, are associated with the volume of operation. During first three years, the percentages of fund outflows into sundry debtors were very low. This might be due to small production and sales by companies during these years. But in the fourth year, the percentage outflow of funds into this item increased. This increase might be due to increase in output and sales.

*In case of 1333 more matured companies, the percentage of fund outflows into inventories was 22 in 1962-63.

cf. Reserve Bank of India Bulletin, July 1964.

Table 7. p. 857.

**For 1333 more matured companies the percentage of fund outflow into sundry debtors was 21 in 1962-63. cf.

Reserve Bank of India Bulletin, July 1964. Table 7.

p. 857.

Cash and Bank Balance: Table T.6.1. indicates that the percentages of fund outflows into cash and bank balances were: 34.4 per cent in the first year, 10.6 per cent in the second year, nil in the third year and 5.7 per cent in the fourth year.

In the first year, the percentage of fund outflows into cash and bank balance was sufficiently large. In absence of full use of funds into fixed assets in the first year, funds were naturally used up in this item. This is clear from the fact that in the third year, 13.4 per cent of total funds were raised by decreasing the existing cash balance.* Moreover, percentage lockup under this head fluctuated during the period because the first four years are not enough for settling down at the minimum cash balance level and get stable. As soon as companies attain maturity the cash and bank balances are likely to stabilize at a very low level.**

*cf. Appendix A.2. infra.

**In case of 1333 more matured companies, the percentage fund outflows into cash and bank balances was -1 in. 1962-63. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.857.

Other Current Uses: The percentages of fund outflows into other current uses during the four-year period were: 18.8 per cent in the first year, 2.1 per cent in the second year, 0.3 per cent in the third year and 11.7 per cent in the fourth year.

Other current uses mainly consisted of two items: loans and advances and marketable securities. During initial years, companies had to make certain advances. But these might decline as the construction stage passes off. On the other hand, marketable securities are not likely to be an investment item for manufacturing companies. Casually when funds are lying idle, they might be invested in marketable securities. In the first and second years, when a part of total funds could not be used in specific items, the same might have been invested in marketable securities. But in fourth year, some of these securities were disposed of in order to meet fund needs.* As soon as these companies attain maturity, this item is likely to involve insignificant percentage of fund outflows.**

*cf. Appendix A.2., infra.

**In case of 1333 more matured companies, the percentage fund outflow into other current uses was 3 in 1962-63. cf. Reserve Bank of India Bulletin, July 1964. Table 7. p. 857.

Fixed Assets and Investments

The percentages of fund outflows into fixed assets and investments were: 33.8 per cent in the first year, 74.6 per cent in the second year, 76 per cent in the third year and 44.8 per cent in the fourth year.

Fixed assets and investments consisted of two items: fixed assets (gross) and long-term investments. Since the fund outflows into investments were insignificant, they are not analysed separately.

In the first year, the percentage fund outflows into this item was comparatively low. This might be due to the gestation involved in construction of buildings and installation of plant and machinery. Presumably funds were raised in advance to meet these uses. Thus, only a small part of total funds could be used in these assets; remaining part of funds was held as current assets.

In the second and third years, as the buildings would have been complete and plant and machinery acquired, large percentages of funds flowed into these assets. In the third year, for instance, existing cash balance was drawn down to meet the level of fund outflows.*

*Vide, supra p. 117.

In the fourth year, the percentage fund outflows into fixed assets declined. In absolute figures, the amount of funds used in this year was about one-half of the total funds used into fixed assets in the third year. This decrease might be due to the fact that most of the fixed assets were acquired by the end of the third year; only small spill over was left for subsequent years. Besides, fund outflows into current assets increased. These two factors might account for a decline in the percentage share of fund outflows into fixed assets in the fourth year.

For a new company, large percentage of fund outflows into fixed assets is limited to early years. Once these assets are acquired, they do not ordinarily involve such a high percentage of fund outflows into fixed assets in later years.*

Other Unclassified Uses

The percentages of fund outflows into other unclassified uses were: 5.1 per cent in the first year,

* In 1333 more matured companies, the percentage of fund outflows into fixed assets was 55 in 1962-63, cf. Reserve Bank of India Bulletin, July 1964. Table 7. p.357.

2.2 per cent in the second year, 3.4 per cent in the third year and 6.9 per cent in the fourth year.

Other unclassified uses consisted of three items: losses, deferred expenses and repayment of loans. As far as third item is concerned, it involved very little funds during the period. Therefore, it is not analysed separately.

The statement of balance sheet changes of all new companies (as appearing in Appendix A.2.) shows that during first two years, the amounts of funds used up in losses were not significant. But in the third and fourth years, they became significant. During first two years of the period, companies showed smaller loss as compared to last two years of the period. This situation might be due to the fact that many companies did not charge depreciation during the construction period; when they charged depreciation, losses appeared in balance-sheets.* However, the four-year period might not correctly

*Balance-sheets of these companies reveal that out of total fifty seven companies, twenty eight showed loss at the end of the first year against thirty four at the end of the fourth years. Further, out of fifty seven companies, there were as many as forty companies by the end of the first year, twenty two companies by (Cont

reflect the profitability aspect of companies since during these years operations might have been below normal.

The outflow of funds into deferred expenses appeared only during first two years; in the third and fourth years, they were nil or negligible. Deferred expenses usually pertain to preliminary expenses (which include capital issue expenses). These expenses were naturally limited to the first two years. However, further issues involved some capital issue expenses in the third and fourth years, but they were negligible.*

From the above analysis, three conclusions emerge. One, as between current assets and fixed assets, the percentages of fund outflows into current assets are likely to rise as a company passes through infancy and the percentages of fund outflows into fixed assets are likely to decline till the stage of expansion or replacement is reached. Two, as between current assets,

the end of the second year, sixteen companies by the end of third year and ten companies by the end of fourth year which did not charge depreciation.

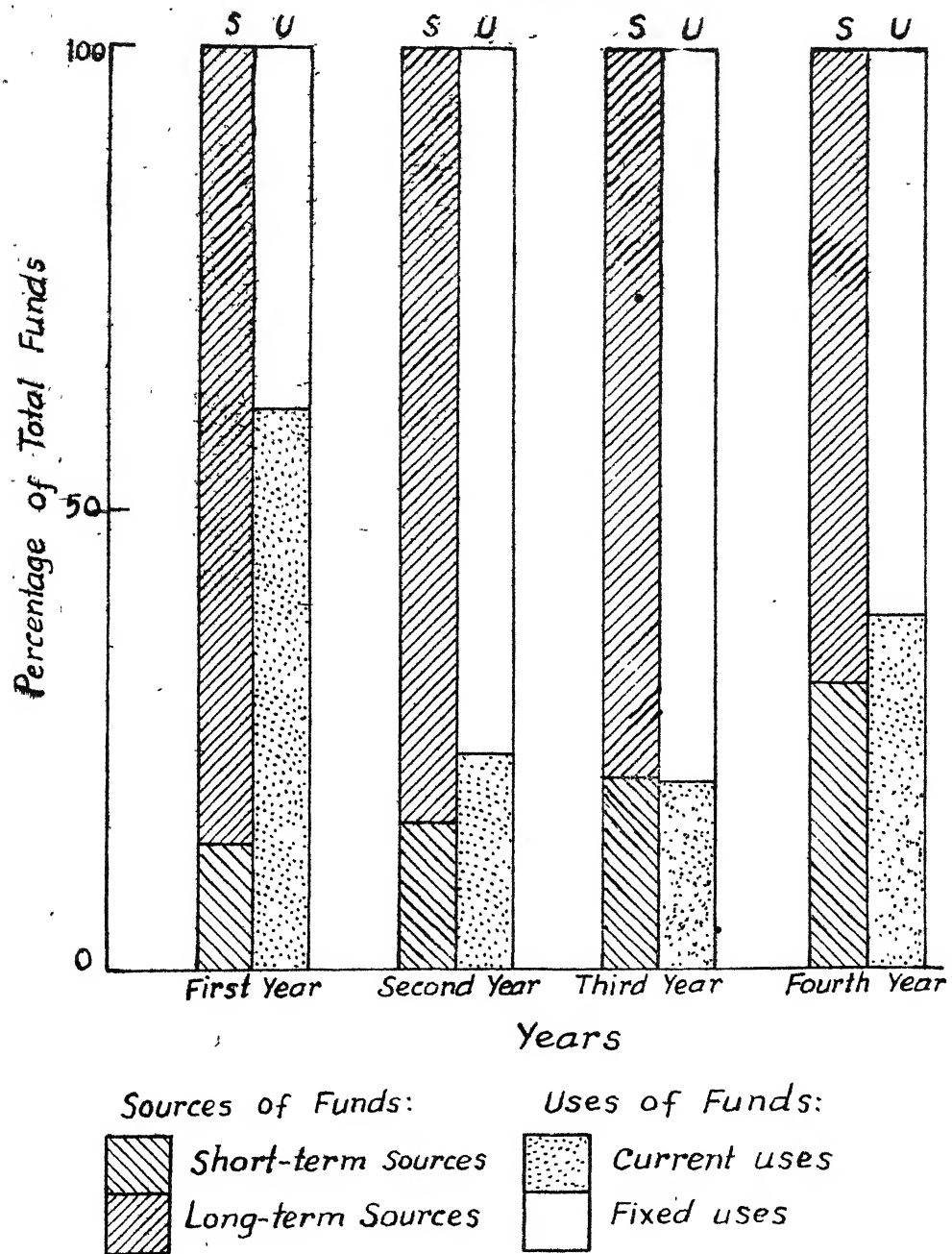
*cf. Table T.4.5., supra.

the percentages of fund outflows into inventories and sundry debtors are likely to rise, and into cash and bank balances and other current assets, they are likely to decline with the passage of the stage of infancy. Three, fund outflows into other unclassified uses showed steady rise during the period. However, they are likely to disappear with the increase in profitability in future.

Sources and Uses of Funds Interrelated

Table T.6.1. indicates that the percentages of short-term funds in total funds were: 11.4, 13.4, 21.1, and 31.4 in the first, second, third and fourth years, respectively, and the percentages of current uses were: 61.1, 23.2, 20.3, and 48.3 in the first, second, third and fourth years respectively. The relationship between short-term sources and current uses on the one hand and long-term sources and non-current uses on the other, is exhibited in Figure F.6.1.

Figure F.6-1.: Relationship Between Sources and Uses of Funds



This figures shows that the percentages of fund inflows from short-term sources rose steadily and, on the other hand, the percentages of fund outflows into current assets first went down and then rose up during the period. Besides, except in the third year when short-term sources were almost equal to current uses, the percentages of fund outflows into current uses were always higher than the percentages of fund inflows from short-term sources.

In the first year, current uses were greater than short-term sources presumably because of two reasons: One, due to insignificant fund outflows into fixed assets, large funds were kept as current assets. Two, fund inflows from short-term loans were small. In the second year, the difference between current uses and short-term sources narrowed because the percentage fund outflows into current uses declined and percentage fund inflows from short-term sources increased. In the third year, both were almost equal. In the fourth year, however, the difference between current uses and short-term sources again widened; higher percentage of funds was used into current assets with a view to increase working capital. But the percentage of fund inflows from short-term sources did not rise to the same extent.

Thus, it can be concluded that during infancy stage of a company, the relationship between current uses and short-term sources on the one hand and non-current uses and long-term sources on the other, is not stable. After this stage is over, the two types of sources and uses of funds are likely to have a stable relationship.

Fund Flows According to Size of Issues

New companies have been classified into 'small' 'medium' and 'large' according to size of their total gross assets at the end of the fourth year. There were fifteen small size companies which had total gross assets up to Rs.50 lakhs; thirty seven medium size companies with total gross assets between Rs.51 lakhs to Rs.500 lakhs; and five large size companies with total gross assets above Rs.500 lakhs, at the end of the fourth year.

Table T.6.2. contains the percentages of fund inflows and outflows in small, medium and large companies during first four years of their existence.

Table T.6.2.: Fund Flows in Small, Medium and Large Size Companies

[illegible]

Note: Table T.6.2. is derived from Appendices
A.5., A.8., and A.11.

Sources of Funds

Internal Sources:

Table T.6.2. shows that by the end of the fourth year, 43 per cent of total funds came from internal sources in small size companies, 31.9 per cent in medium size companies and 9.7 per cent in large size companies. In terms of growth rate, internal sources grew at 64 per cent annually in small companies, at 47.5 per cent in medium companies and at 46 per cent in large companies during the four-year period.* After attaining maturity, medium and large size companies are likely to show larger percentage of fund inflows from internal sources.**

*Simple linear rate of growth.

**In 1962-63, the percentages of fund inflows from internal sources were 49 in 1333 medium and large companies and 30 in 1015 small companies. cf.
Reserve Bank of India Bulletins, July and October 1964.
Tables 7 and 4, pp.857 and 1254, respectively.

Depreciation: In small size companies, the percentages of fund inflows from depreciation during the four-year period were: nil in the first year, 5.3 per cent in the second year, 11.5 per cent in the third year and 16.4 per cent in the fourth year; 0.2 per cent in the first year, 1.2 per cent in the second year, 5.7 per cent in the third year and 14.5 per cent in the fourth year in medium size companies; and nil in the first three years and 8.1 per cent in the fourth year in large size companies.

Thus small size companies started charging depreciation from the second year; from third year it was charged by most of these companies and at full rates. In case of medium size companies, the percentage fund inflows from depreciation was high only in the fourth year, though some of the companies started charging depreciation from the first year. In case of large companies, fund inflows from depreciation were nil during first three years, and little in the fourth year.*

*Out of total fifteen small size companies, three charged depreciation in the first year (though the absolute amounts were insignificant), ten in the second year, twelve in the third year, and thirteen (Cont.)

The differences in fund inflows from depreciation in three types of companies might be attributed to differences in gestation periods involved. Small and medium size companies, which might have relatively small buildings or simple and less complicated plants and machinery, might have completed the construction stage by the second or third year and started charging depreciation. On the other hand, large size companies might have constructed big buildings and imported machinery from abroad. The completion of buildings and installation of machinery might have taken more time. The longer gestation period might have gone beyond the fourth year. The result was that the fund inflows from depreciation in large companies were nil during the first three years and small in the fourth year. In future years, medium and large size companies are likely to show higher percentage of fund inflows from depreciation

in the fourth year. Out of thirty seven medium size companies, fourteen charged depreciation in the first year, twenty five in the second year, twenty eight in the third year and thirty two in the fourth year. Further, during first three years, no company in the 'large' group charged depreciation; in the fourth year, two companies charged depreciation (one at full rates).

presumably because of differences in their asset structures.*

Development Rebate Reserve: Table T.6.2. shows that the percentages of fund inflows from development rebate reserve in three types of companies were: 0.5 per cent in the first year, nil in the second year, 4.6 per cent in the third year, and 2.5 per cent in the fourth year in small size companies; 0.3 per cent in the first year, 0.8 per cent in the second year, 4.7 per cent in the third year and 4.3 per cent in the fourth year in medium size companies; and nil in the first two years, 0.1 per cent in the third year and nil in the fourth year in large size companies.

Thus, in small and medium size companies, fund inflows from development rebate reserve started from the first year, it reached high in the third year and declined (in percentage as well as in absolute amount) in the fourth year. This confirms that most of the

*In 1962-63, the percentages of fund inflows from depreciation were 28 in 1333 medium and large companies and 17 in 1015 small companies. cf.

Reserve Bank of India Bulletins, July and October 1964. Table 7 and 4, pp. 857 and 1254 respectively.

plant and machinery in small and medium size companies was acquired by the end of the third year, and the development rebate was charged on them. In the fourth year, only limited machinery might have been left for charging development rebate. On the other hand, except one, none of the five large size companies created development rebate reserve during the four-year period. This might be due to longer period involved in acquiring and installing the plant and machinery in these companies.

Reserves, Provisions, and Surpluses: The percentage of fund inflows from reserves, provisions, and surpluses in three types of companies were: 1.1 per cent in the first year, nil in the second year 3.4 per cent in the third year, and 7.6 per cent in the fourth year in case of small size companies; 1.1 per cent in the first year, 2.2 per cent in the second year, 1.1 per cent in the third year and 11.7 per cent in the fourth year in case of medium size companies, and 0.5 per cent in the first year, 0.6 per cent in the second year, 0.3 per cent in the third year and 0.4 per cent in the fourth year in case of large size companies. These percentages show that in small and medium size companies increased percentage of funds flowed-in in the fourth year from this source, but in case of

large size companies, percentage inflow of funds from this source was almost negligible during the period..

Table T.6.2. shows that funds started flowing-in from reserves, provisions, and surpluses in the third year in small size companies and in the fourth year in medium size companies (in the first three years, the percentages were very small). It might be due to the fact that small size companies had begun their operations from the beginning of the third year and earned some profits. In medium size companies, the gestation period might have prolonged to one year or more, and they might have started operations and earned profits from the beginning of fourth year. Large size companies, however, might not have crossed the gestation stage during the period. The fund inflows from reserves, provisions and surpluses in these companies did not arise during the first four years of their existence.*

*The small percentages of fund inflows from reserves, provisions, and surpluses in large size companies in fact do not relate to profits; they arose on account of capital reserves (premium on share issues) and the provision for tax.

Other Internal Sources: In small size companies, the percentages of fund inflows from other internal sources were: nil in the first year, 18.1 per cent in the second year, 1.1 per cent in the third year and 16.5 per cent in the fourth year. In the second year, fund flowed-in as or result of decrease in loans and advances and in the fourth year, as a result of decrease in cash balance.

In medium size companies, the percentages of fund inflows from other internal sources were: nil in the first year, 11 per cent in the second year, 6.1 per cent in the third year and 1.4 per cent in the fourth year. In second and third years, fund flowed-in as a result of decrease in cash balance and in fourth year, as a result of decrease in other current assets.

In large size companies, these percentages were: nil in the first year, 0.1 per cent in the second year, 23.7 per cent in the third year and 1.2 per cent in the fourth year. In the third year, significant funds flowed-in from other current sources as a result of decrease in cash and bank balances, loans and advances and other current assets.

Thus in small size companies, loans and advances might have decreased in the second year because amounts

relating to certain works, etc. were transferred to specific items on their completion. In the fourth year, funds flowed-in as a result of decrease in cash balance. Medium size companies also used up their cash balance in the second year to pay for the fixed assets. But in case of large size companies, it was only in the third year that the funds flowed-in as a result of decrease in current assets. In this year, 93.5 per cent of total funds flowed-out into fixed assets. In order to meet this, current assets were decreased.

External Sources

The percentages of fund inflows from total external sources during the four-year period were: 98.4 per cent in the first year, 76.6 per cent in the second year, 79.4 per cent in the third year and 57.0 per cent in the fourth year in small size companies; 98.4 per cent in the first year, 84.8 per cent in the second year, 82.3 per cent in the third year and 63.1 per cent in the fourth year in medium size companies; and 99.5 per cent in the first year, 99.3 per cent in the second year, 75.9 per cent in the third year and 90.3 per cent in the fourth year in large size companies. Thus, in all the three types of companies, the percentages

of external sources declined during the period. The extent of annual decreases were: 10.5 per cent in small size companies, 7.75 per cent in medium size companies and 2.5 per cent in large size companies. The percentage decrease was highest in small size companies because they succeeded in raising funds from internal sources earlier. But among large size companies, there were only few companies which could raise significant funds from internal sources. However, medium and large size companies are likely to show a faster decrease in percentage fund inflows from external sources in future as against small companies.*

Share Issues: The percentages of fund inflows from share issues in three types of companies were: 68.8 per cent in the first year, 38.3 per cent in the second year, 23.0 per cent in the third year and 41.8 per cent in the fourth year in small size companies; 85.9 per cent in the first year, 47.1 per cent in the second year, 20.8 per cent in the third year and 23.9 per cent

*In 1962-63, the percentages of fund inflows from external sources were 51 in 1333 medium and large companies and 70 in 1015 small companies. cf. Reserve Bank of India Bulletins, July and October 1964. Table 7 and 4, pp.857 and 1254 respectively.

in the fourth year in medium size companies; and 96.0 per cent in the first year, 77.4 per cent in the second year, 34.2 per cent in the third year and 23.1 per cent in the fourth year in large size companies. These percentages give two indications: One, the percentages of fund inflows from share issues increased with the increase in size of issues and, two, in small and medium size companies, the percentage fund inflows increased in fourth year as against further decrease in large size companies.

As far as higher percentages of fund inflows from share issues are concerned, the extent of fixed asset financing might be an important factor causing differences in three size groups. Besides, in small and medium size companies, the percentage fund inflows from share issues increased in the fourth year presumably because they raised additional funds from this source immediately after the completion of gestation period.

In the three size-groups, the percentages of fund inflows from share issues declined during the period. But the degree of decrease was different in three types of companies. In small size companies, the annual rate of decrease was 10 per cent, in medium size companies, 17.5 per cent, and in large size companies, 19 per cent.

Long-Term Debts: The percentages of fund inflows from long-term loans were: 8.1 per cent in the first year, 26.6 per cent in the second year, 21.8 per cent in the third year and 5.1 per cent in the fourth year in small size companies, 1.3 per cent in the first year, 19.4 per cent in the second year, 24.4 per cent in the third year and 15.4 per cent in the fourth year in medium size companies; and nil in the first year, 15.2 per cent in the second year, 36.6 per cent in the third year and 32.8 per cent in the fourth year in large size companies.

Thus, in small size companies, the percentage of fund inflows from long-term loans started declining from the third year as against medium and large size companies from the fourth year. This might be due to the fact that as a result of decline in the percentage of fund outflows into fixed assets in the third year, the percentages of fund inflows from long-term loans might have declined. In medium and large size companies, decline in the percentage fund outflows into fixed assets in the fourth year might have resulted a decrease in the percentage fund inflows from long-term loans. Besides, in large size companies, higher percentages of funds flowed-in from long-term loans as compared to small and medium size companies. This might be due to the fact that those companies which had larger fixed assets involved

higher long-term financing.* Hence relatively more long-term loans in large size companies.

Short-Term Debts: The percentages of fund inflows from short-term debts were: 21.5 per cent in the first year, 11.7 per cent in the second year, 34.6 per cent in the third year and 10.1 per cent in the fourth year in case of small size companies; 11.2 per cent in the first year, 18.3 per cent in the second year, 37.1 per cent in the third year and 28.8 per cent in the fourth year in case of medium size companies; and 3.5 per cent in the first year, 6.7 per cent in the second year, 5.1 per cent in the third year and 34.4 per cent in the fourth year in case of large size companies. These percentages give two indications: One, in small and medium size companies, the percentages of short-term loans declined in the fourth year as against an increase in large size companies. Two, the percentages of fund inflows from short-term loans were larger in small and medium size companies as against large size companies during first three years of the period.**

*Infra, pages 147-8.

**In more matured companies, small size companies raised higher percentages of funds through short-term loans (66.5 per cent) as against medium and large companies (35 per cent) in 1962-63. cf. Reserve Bank of India Bulletins, October and July 1964. Tables 4 and 7, pp.1254 and 857 respectively.

As far as first point is concerned, increase in internal sources by the end of third year in small and medium size companies might be an important factor causing percentage decline in short-term loans in the fourth year. But in large size companies, this was not true because they had little internal financing by the end of the period. Regarding second point, the timing of starting operations might be an important factor: small and medium size companies might have started operations earlier, hence the higher fund inflows from short-term loans during first three years as against large size companies.

Thus, from the analysis of sources of funds in small, medium and large size companies, three main conclusions emerge: One, as between internal and external sources, the percentages of fund inflows from internal sources increased and from external sources decreased during the period in all the three types of companies. In small size companies, the percentage fund inflows from internal sources increased at 64 per cent, in medium size companies, at 47.5 per cent and in large size companies, at 46 per cent. Conversely, the percentage fund inflows from external sources decreased at 10.5 per cent in small size companies, at 7.75 per cent in medium size companies and at 2.5 per cent in

large size companies, during the four-year period.

Two, as between internal sources, small size companies raised increasingly more funds from depreciation, development rebate reserve and reserves, provisions, and surpluses from the third year, and medium size companies from the fourth year. But large size companies could raise little funds from these sources during the period.

Three, as between external sources, the percentages of fund inflows from share issues decreased in small, medium and large size companies during the period; but in medium and large size companies, the rate of decrease was faster than the rate of decrease in small size companies. The percentages of fund inflows from long-term debts started declining from the third year in small size companies as against increase in the fourth year in medium and large size companies. The percentages of fund inflows from short-term loans declined during fourth year in small and medium size companies as against an increase in large size companies.

Uses of Funds

Current Uses

The percentages of fund outflows into three types of companies were: 48.4 per cent in the first year, 17.0 per cent in the second year, 57.4 per cent in the third year and 17.7 per cent in the fourth year in small size companies; 59.3 per cent in the first year, 18.7 per cent in the second year, 36.8 per cent in the third year and 62.3 per cent in the fourth year in medium size companies; and 85.6 per cent in the first year, 38.4 per cent in the second year, 5.2 per cent in the third year and 38.1 per cent in the fourth year in large size companies.*

In small size companies, the percentage fund outflows into current assets decreased in the second year, increased in the third year and again decreased in

*In 1962-63, the percentages of fund outflows into current assets were 45 in 1333 medium and large companies and 66 in 1015 small companies. cf. Reserve Bank of India Bulletins, July and October 1964. Tables 7 and 4, and pp. 857 and 1254 respectively.

the fourth year. In the second year, the decrease was caused by an increase in the fixed assets. In the third year, increase might be due to working capital requirements. In the fourth year, significant decrease in percentage fund outflows into current assets might be due to losses on the one hand and increase in fixed assets on the other.

In medium and large size companies, the percentage decline in fund outflows into current assets in the second and third years was due to increased fund outflows into fixed assets.

Inventories: The percentages of fund outflows into inventories in three types of companies were: 12.4 per cent in the first year, 12.8 per cent in the second year, 33.3 per cent in the third year and nil in the fourth year in small size companies; 6.7 per cent in the first year, 14.8 per cent in the second year, 29.8 per cent in the third year and 33.3 per cent in the fourth year in medium size companies; and nil in the first year, 1.1 per cent in the second year, 5.0 per cent in the third year and 17.7 per cent in the fourth year in large size companies. Thus, larger percentages of funds flowed out into inventories in small and medium size companies during the four-year period. But in case of

large size companies, fund outflows into inventories actually started from the fourth year. It might be due to the fact that the former two types of companies might have started operations earlier, so larger fund outflows into inventories in their case. But the latter types of companies might have started little operations in the fourth year, hence small fund outflows into inventories only in this year.*

Sundry Debtors: The percentages of fund outflows into sundry debtors during the four-year period were: 0.5 per cent in the first year, 2.1 per cent in the second year, 5.7 per cent in the third year and 7.6 per cent in the fourth year in small size companies; 1.5 per cent in the first year, 3.8 per cent each in the second and third years and 15 per cent in the fourth year in medium size companies; and nil in the first and second years, 0.2 per cent in the third year and 0.1 per cent in the fourth year in large size companies.

*In 1962-63, the percentages of fund outflows into inventories were 22 in 1333 medium and large companies and 38 in 1015 small companies. cf. Reserve Bank of India Bulletins, July and October 1964. Tables 7 and 4, and pp. 857 and 1254 respectively.

Thus, in large size companies, the percentage fund outflows into sundry debtors were insignificant, as compared to small and medium size companies. This might be due to relatively smaller level of operations in large size companies and increased operations in small and medium size companies during the period. Besides, in medium size companies, the percentage of fund outflows into sundry debtors was higher in the fourth year as against small size companies. This might be due to the fact that medium size companies extended more credits to their customers.

Cash and Bank Balances: The percentages of fund outflows into cash and bank balances in three types of companies were: 19.9 per cent in the first year, 2.1 per cent in the second year, and nil in the third and fourth years in small size companies; 39.0 per cent in the first year, nil in the second and third years and 10.6 per cent in the fourth year in medium size companies; and 16.3 per cent in the first year, 33.2 per cent in the second year, nil in the third year and 2.1 per cent in the fourth year in large size companies. Thus, in small, medium and large size companies, further funds were not used in building cash and bank balances in later years of the period. Besides, there is no significant difference in percentage fund outflows into

cash and bank balances among three types of companies.

Other Current Uses: The percentages of fund outflows into other current uses in three types of companies were: 15.6 per cent in the first year, nil in the second year, 18.4 per cent in the third year and 10.1 per cent in the fourth year in small size companies; 12.2 per cent in the first year, 1.1 per cent in the second year, 3.2 per cent in the third year and 3.4 per cent in the fourth year in medium size companies; and 69.3 per cent in the first year, 4.1 per cent in the second year, nil in the third year and 18.1 per cent in the fourth year in large size companies. Thus, in small and large size companies, funds were raised by decreasing other current assets. In medium size companies, the decrease in marketable securities was offset by a higher increase in loans and advances, and this resulted in continuous outflow of funds into other current assets in these companies during the period.

Fixed Assets and Investments

The percentages of fund outflows into fixed assets and investments in three types of companies were: 45.7 per cent in the first year, 73.4 per cent in the second year, 32.2 per cent in the third year and 59.5 per cent in the fourth year in small size companies;

35.9 per cent in the first year, 80.0 per cent in the second year, 56.8 per cent in the third year and 34.2 per cent in the fourth year in medium size companies; and 7.5 per cent in the first year, 58.6 per cent in the second year, 93.5 per cent in the third year and 52.1 per cent in the fourth year in large size companies. Thus, the percentage fund outflows into fixed assets were larger in the intervening (second and third) years of the period in three types of companies.

The percentage fund outflows into fixed assets were larger in small and medium size companies as compared to large size companies in the first year. This might be due to the nature of assets in three types of companies. In small and medium size companies, certain assets might have been acquired in the first year (because of indigeneous character or smallness in size, etc.) but large size companies might have acquired only little of them by this time. In the second year again, the percentage outflow of funds into fixed assets were larger in small and medium size companies as compared to large size companies. The probable difference of gestation period in three types of companies might have influenced the percentage fund outflows in the second year.

In the third year, the percentage of fund outflows into fixed assets went up very high in large size companies, as against a decrease in small and medium size companies. This might be due to the fact that by the end of third year, major part of buildings might have been completed and machines bought by large size companies. Naturally this involved large funds. On the other hand, small and medium size companies might have largely met their fixed asset needs earlier, therefore, the percentage of fund outflows into this item declined in the third year.

In the fourth year, there was an increase in percentage of fund outflows into fixed assets in small size companies, as against decrease in medium and large size companies.* In small size companies, the increase might be due to the fact that certain items of fixed assets which could not be bought during earlier years because of shortage of funds were bought during this year. This is further confirmed by the fact that they

*In 1962-63, the percentages of fund outflows into fixed assets were 55 in 1333 medium and large companies and 34 in small companies. cf. Reserve Bank of India Bulletins, July and October 1964.

raised additional funds from share issues during the fourth year.*

Other Unclassified Uses

The percentages of fund outflows into other unclassified uses were: 5.9 per cent in the first year, 9.6 per cent in the second year, 10.4 per cent in the third year and 22.8 per cent in the fourth year in small size companies; 4.8 per cent in the first year, 1.3 per cent in the second year, 6.4 per cent in the third year and 3.5 per cent in the fourth year in medium size companies; and 6.9 per cent in the first year, 3.0 per cent in the second year, 1.3 per cent in the third year and 9.8 per cent in the fourth year in large size companies.

In small size companies, the percentages of fund outflows into other unclassified uses were high presumably because they could start operations in the first year and showed losses. In the fourth year, there was no additional loss in these companies but because of repayment of current and non-current liabilities, the fund outflows into this item increased:

In medium size companies, the outflow of funds into other unclassified uses were mainly in the form of

*Vide. supra, p.137.

preliminary expenses during first two years and losses during last two years of the period. The losses declined in the fourth year presumably because of higher volume of operations.

In large size companies, the fund outflows into other unclassified uses were mainly in the form of deferred expenses in the first two years, repayment of certain current liabilities in the third year and losses in the fourth year. The large size companies started incurring losses from the fourth year presumably because of the late operations.

From the above analysis of fund outflows in three types of companies, five conclusions emerge: One, as between current and fixed uses, the percentage of fund outflows into current uses increased and into fixed uses decreased in the fourth year in medium and large size companies. In small size companies, the percentage fund outflows into current uses increased in the third year and decreased in the fourth year. Two, as between current uses, the percentages of fund outflows into inventories and debtors were insignificant in large size companies as compared to small and medium size companies. Three, the percentages of fund outflows into fixed assets and investments were larger in large size companies as

compared to small and medium size companies. Besides, the percentages of fund outflows into fixed assets were largest in the second year in small and medium size companies and in the third year in large size companies. This indicates the differences in time lag involved in acquiring fixed assets in three types of companies. Four, in small size companies, losses were limited to third year; but in medium size companies they largely arose from the third year and in large size companies from the fourth year. Fifth, small size companies started paying off current and non-current liabilities from the fourth year but medium and large size companies did not pay off non-current liabilities (to any significant extent) during the four-year period.

Thus, it is clear from the analysis of sources and uses of funds in small, medium and large size companies that in those cases where the percentage fund inflows and outflows were influenced by the size of companies, medium size companies remained in the middle of small and large size companies. However, in certain cases, the pattern of fund inflows and outflows in medium size companies was closer to that of small size companies; in certain cases it was closer to that of large size companies. But in most of the cases, it was closer to small size companies. This is due to pre-dominance of companies belonging to lower limit of medium size.

Part Three

CHAPTER SEVEN

Optimal Capital Structure

Optimal financing decisions involve planning of sources and uses of funds to maximize net returns. This implies the choosing of a combination of sources which minimizes the cost of capital and choosing a mix of uses which maximizes the return. Choice of combination of sources implies the problem of capital structure.

Funds may be raised either through shares, or debentures, or term loans, or short term sources. As for the choice between different sources, it depends upon three important considerations: income, risk and control.

Income

The primary aim of a business enterprise is to maximize the earnings. This aim can be achieved by choosing sources with minimum cost. Payments to preference shareholders and debenture holders are fixed. Therefore, maximization of their income is not the objective for financing decisions. But the ordinary

shareholders have residual claim on profits. Therefore, the aim of maximization of earnings relates to them.

Earnings Per Share (eps) may be a useful index for analysing the income aspect. The relationship between eps and capital structure is circular - both affecting one another.

Earnings per share can be increased by raising funds from those sources which involve incremental cost lower than the incremental earnings. The explicit cost of preference shares is the payment of dividends at contractual rates plus tax. The explicit cost of debentures and loans ordinarily is the payment of interest. If pre-tax earnings are higher than the amount of dividends plus tax and interest on preference shares and borrowed capital respectively, the excess will go to ordinary shareholders. Thus, they will get earnings at higher rates than the rate of return on the entire capitalization of the business. The inclusion of fixed charge securities in the capital structure is called 'trading on equity' and the additional gain to ordinary shareholders by including these securities is called 'leverage'. Because of leverage advantage, a firm might be tempted to issue fixed charge securities in order to raise the eps.

Risk

Risk is the probable exposure to loss. It is expressed in terms of 'implicit' cost. Different sources involve different degrees of risk and, therefore, implicit cost varies with the type of sources included in the capital structure. Increase in risk raises the capitalization rate of a business which may, in its turn, lower down the market price of shares unless it is offset by an increase in earnings per share. Thus, the maximization of earnings per share is also related to the degree of risk associated with different sources of funds.

Risk on ordinary shares may arise because of dilution in earnings per share. Unless the rate of incremental earnings from a new project is higher than the rate of return on entire capitalization of the business, financing through ordinary shares may lower down the earnings per share. With a decline in eps, the market price of shares is likely to decline and the investors may like to shift their investments to other firms with same degree of risk on similar securities but offering higher earnings.

Risk in case of preference shares and borrowed capital arises because of fixed payments related to them.

Preference shares involve payments in the form of dividends at contractual rates plus tax and the provision for sinking fund, if they are redeemable preference shares. Borrowed capital, on the other hand, involves payment of interest and repayment of principal. Payments related to borrowed capital cannot be postponed; but the payments related to preference shares can be postponed under certain conditions.

The amount of fixed payments increases with the additional issue of preference shares or borrowings. Since no business can be sure of its future fund inflows, the chances of default increase with the increase in the burden of fixed payments. Therefore, high leverage raises the capitalization rate of the business with rise in the degree of risk beyond a critical limit.*

Control

The control of a company lies in the hands of those who bear the maximum risk. Since ordinary shareholders bear maximum risk, the control of a company lies in their hands. With additional issue of ordinary shares, new shareholders may share the control. That may mean dilution in controlling power of existing shareholders.

*See Figure F.7.1., infra.

In some cases ordinary shareholders assign high weightage to control aspect. In order to safeguard the interest of these shareholders, the Indian Companies Act, 1956 provides that unless otherwise stated in the Articles of the company, ordinary shareholders will have pre-emptive rights on additional issue of ordinary shares.

The problem of capital structure essentially boils down to the choice between equity capital on the one hand and preference share and borrowed capital on the other. By including fixed charge securities in the capital structure, the income of ordinary shareholders increases. This increase in the earnings of ordinary shareholders is explained by leverage. However, there is some controversy regarding the concept of leverage. In order to lend clarity to the concept of leverage, Professor Hunt divides it into two parts: 'trading on equity' and 'leverage', or, 'balance-sheet leverage' and 'income statement leverage'.

'Trading on Equity' (Balance-Sheet Leverage): Pearson Hunt defines trading on equity in the following words: "The use of fixed (or limited) charge securities in the capitalization of a company, measured by the ratio of (i) the rate of return on existing common stock to (ii) the rate of return on the entire capitalization as

it would have been if there were only common stock outstanding".*

The ratio of trading on equity is expressed as:

$$\frac{E/CS}{\partial Y/C} = \left[\frac{(Y-F)^{\partial}}{CS} \right] \frac{C}{\partial Y} = \frac{Y-F}{SY} = \frac{1}{S} \frac{(Y-F)}{(Y)}$$

If preferred stock were also used, the formula would become as follows:

$$\frac{1}{S} \left[1 - \frac{1}{Y} (F + \frac{F'}{\partial}) \right]$$

Where;

C = The total capitalization of the corporation;

D = The proportion of debt and preferred stock in the total capitalization, $0 \leq D \leq 1$;

S = The proportion of common stock in the total capitalization, $0 \leq S \leq 1$;

F = The interest charges or product CD;

F' = The preferred dividend requirements;

t = The rate of taxation on income;

∂ = The complement of rate of taxation or $(1-t)$;

*Hunt, Pearson. 'A Proposal for Precise Definition of "Trading on Equity" and "Leverage". Journal of Finance, September 1961. pp. 383-6.

Y = The amount of earnings available before interest and taxes;

E = The amount of earnings available to common equity after interest and taxes;

Capital Leverage (Income Statement Leverage): He defines leverage as follows: "The effect of changes in earnings under conditions where the capitalization is not altered, created by the use of fixed (or limited) charge securities in the capitalization of a company measured by the ratio of (i) the rate of growth in earnings available to common stock equity to (ii) the rate of growth of earnings before interest and taxes",*

Symbolically,

$$\text{Leverage} = \frac{e/E}{y/Y} = \left[\frac{\partial Y}{(Y-F)\theta} \left(\frac{Y}{Y} \right) \right] = \frac{Y}{Y-F}$$

Where;

y = a change in Y; and e = a change in E caused by occurrence of Y.

If preference shares were also used, the formula would become as follows:

$$L = \frac{Y}{Y - \left[F + (F'/\theta) \right]}$$

*Ibid.

Thus the 'trading on equity' relates changes in the debt-equity proportions to the rate of return on the ordinary shares. The primary advantage occurring to ordinary shareholders from 'trading on equity' arises when funds raised through debt or preference shares can be employed to produce a rate of return higher than the cost of capital. The extent of 'trading on equity' changes with the changes in the proportions of ordinary share capital or with the changes in fixed charges. On the other hand, leverage is concerned with how much a change in earnings will effect the returns on ordinary shares. For a given level of income, the extent of leverage increases with the increase in the proportion of fixed charges. Thus, high leverage implies the larger proportion of fixed charges which may mean increased risk. Further, if incremental earnings are lower than the incremental cost of borrowings, the application of negative leverage would lower down the earnings per share sharply. Leverage shows the effect of trading on equity on earnings per share on the one hand and the degree of risk on the other.

From theoretical point of view, this distinction between leverage and trading on equity is of great significance. But in practice, this distinction may not be easy to draw.

Optimal Capital Structure

Another question relates to the extent to which a firm may take advantage of leverage. In literature, there are two approaches dealing with this aspect of the theory of optimal capital structure: traditional approach and non-traditional approach. According to the traditional approach the cost of capital of a firm is influenced by its capital structure. Because of this relationship, the idea of optimal capital structure has great significance in the theory of finance. But, on the other hand, according to non-traditional approach, the cost of capital is independent of capital structure and hence the problem of optimal capital structure does not emerge.

According to traditional approach, the effect of leverage is of central importance in determining the best mix of debt and equity. An optimal capital structure is one that minimizes the overall cost of capital to a company. It is the combination of debt and equity which will maximize the earnings per share and market price of shares.

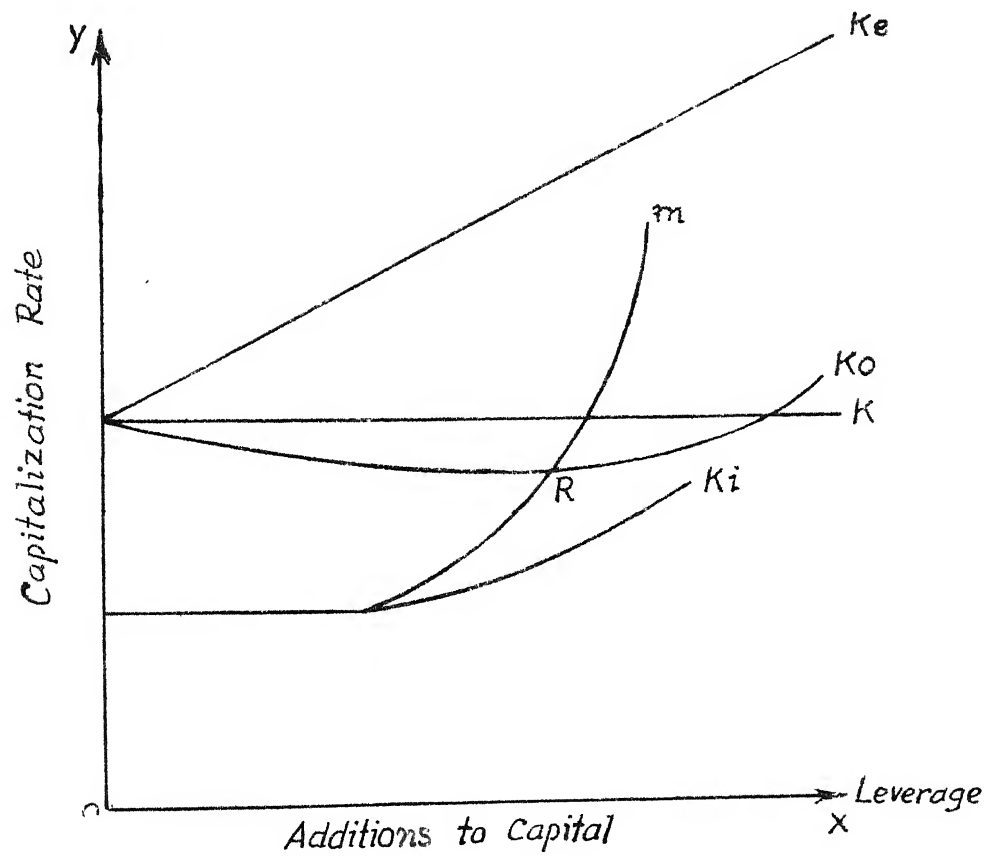
Theorists of this group assert that there is an optimum point or range of financial leverage for every firm at which the market price of ordinary shares will be

relatively higher than at other degrees of leverage. They suggest an optimal capital structure: the leverage should be increased until the marginal cost of additional debt is equal to company's average cost of capital.*

This relationship is shown in figure F.7.1., where k_e is the cost of equity capital, k_i is the cost of debt capital, m is the marginal cost of borrowing, k is the rate of earnings before interest and tax, and k_o is the overall cost of capital. The aggregate cost of capital is determined by weighting k_e and k_i by the relative amounts of equity and debt used by the firm.

*Solomon, Ezra. 'Leverage and the cost of capital', .
The Journal of Finance, May, 1963.

Figure.F.7.1.: Leverage and Capitalization Rate
(Tax effect included)



Source: Ezra Solomon, 'Leverage and the Cost of Capital',
THE JOURNAL OF FINANCE, May, 1963. P. 277

Starting with a firm financed by equity funds ($L=0$), the combined cost of capital (k_0) decreases as debt is added to the capital structure until the point is reached where the risk avoidance of potential lenders causes the marginal cost of debt (m) to rise. This makes the average cost of debt curve (k_i) move upward, though more slowly than the marginal curve. According to this logic, an ideal degree of leverage is attained when the marginal cost of debt (m) is equal to the company's average cost of capital. R in the diagram represents the minimum cost of capital. Subsequently, as m rises above k_0 , the combined cost of capital increases as more debt is raised.

Figure F.7.1. implies that the marginal cost curve will intersect average cost curve at its minimum point. But this relationship between marginal and average cost curves is doubtful on two grounds: One, the overall cost of capital is a weighted average of both the average cost of debt capital, k_i , and the average cost of equity capital, k_e . Two, the marginal cost of debt curve, m , simply shows the rate which the company must pay on each increment of debt. If or when it intersects the average cost of capital depends upon the sharpness of the rate of change and the effect of the increased leverage. Another drawback with marginal approach is

that it is difficult to determine these curves statistically. As a result, it is not easily possible to ascertain the optimal use of financial leverage.*

Despite these limitations, marginal approach has a significant place in the theory of finance. However, in Solomon's diagram (Figure F.7.1), certain improvements have been suggested to make the approach more useful. These improvements mainly relate to the shape of curves and the definition of marginal cost.

On the other extreme, there are non-traditional theorists who reject the theory of optimum capital structure. Their views stem largely from the Modigliani - Miller position that a firm's total investment value and the cost of capital is independent of its capital structure and that, therefore, the overall cost of capital, k_0 , is constant for all levels of financial leverage.**

*Cohen, Jerome and Robbins, Sidney, M. The Financial Manager. New York: Harper and Row, and Tokyo: John Weatherhill, Inc., 1966. pp. 608-9.

**Modigliani, Franco and Miller, M.H. 'The Cost of Capital, Corporation Finance, and the Theory of Investment' American Economic Review, September, 1959.

But the Modigliani - Miller theorem is based on the unrealistic assumption of existence of perfect market; it considers only long-term effect and ignores effect of tax completely. Therefore, their stand is generally not acceptable.

Thus the notion of optimal capital structure holds good on theoretical grounds. Commenting on the effect of financial leverage on the cost of capital, Ezra Solomon concludes: "In short, the thesis that a company's cost of capital is independent of its financial structure is not valid. As far the leverage effect is concerned (and ignoring all the other considerations that might influence the choice between debt and equity), there does exist a clearly definable optimum position - namely, the point at which the marginal cost of more debt is equal to, or greater than, a company's average cost of capital.*"

Other Factors Influencing the Capital Structure of a Company

In addition to income, risk and control, there are other factors which influence the capital structure

*Solomon, Ezra. 'Leverage and the Cost of Capital':

The Journal of Finance, May, 1963. p.279.

of a firm. These factors are: size of the business, prospects of growth, nature of the firm, type of business, customs in the industry, attitude of the investment market, tax consideration, government policy, etc. It has not been possible yet to incorporate these factors into the formal theory of optimal capital structure or to explain them significantly in empirical research. Still they exercise considerable influence in practice on the capital structure of firms.

CHAPTER EIGHT

Analysis of Capital Structure of New Companies

The analysis of capital structure of new companies is arranged in two parts:

- (1) Capital structure of fifty seven new companies;
- (2) Capital structure of (a) small, (b) medium, and (c) large size companies.

Capital Structure of All New Companies

Table T.8.1. contains figures relating to aggregate balance-sheets of all fifty seven new companies for the first four years of their existence.

Table T.8.1.: Aggregate Balance-sheets of All New Companies*

Liabilities and Net Worth	(Rs. in lakhs)				
	Years				Assets
	I	II	III	IV	
Short-term loans	91	229	796	1619	Current assets
Other current liabilities	129.6	466	823	1224	Fixed assets (net)
Long-term loans	34	658	2029	2937	
Preference share capital	141	330	656	786	
Net worth	1352.2	3278	4189	4909	
Total	1747.8	4961	8493	11475	Total
					1747.8 4961 8493 11475

*Derived from Appendix A.1.

- Note: (1) Short-term loans include: bank loans and loans from others.
- (2) Other current liabilities include: trade credits, provision for tax and other current liabilities.
- (3) Long-term loans include: debentures, bank mortgages, loans from finance corporations, fixed deposits, loans from Government and other long-term loans.
- (4) Net worth consists of: ordinary share capital plus credit balance of profit and loss account, capital reserve, general and other reserves, development rebate reserve minus losses and deferred expenses appearing on the asset side of the balance-sheets.
- (5) Current assets include: inventories, sundry debtors, cash and bank balance, loans and advances and other current assets.
- (6) Net fixed assets include: net fixed assets and long-term investments.

With the help of Table T.8.1., Table T.8.2. has been worked out. This Table contains figures relating to capital structure of all new companies during first four years of their existence.

Table T.8.2.: Capital Structure of All New Companies

	Amounts (Rs. in lakhs)				Percentages			
	I year	II year	III year	IV year	I year	II year	III year	IV year
Short-term loans	91	229	796	1619	5.6	5.1	10.4	15.8
Long-term loans	34	658	2029	2937	2.1	14.6	26.4	23.6
Preference share capital	141	330	656	786	8.7	7.3	8.6	7.7
Net worth	266	1217	3481	5342	16.4	27.0	45.4	52.1
	1352	3278	4189	4909	83.6	73.0	54.6	47.9
Total	1618	4495	7670	10251	100	100	100	100
Leverage Ratio ($\frac{L}{S}$)	1.2	1.4	1.8	2.1				

Note: (1) Other current liabilities, normally not involving explicit cost, have been excluded' from the capital structure.

(2) Strictly speaking, preference shares are neither equity nor debt. In the present context, classifying into fixed charge capital and equity capital, preference share capital is included, in the former category.

(3) The leverage ratio is measured as $\frac{1}{S}$; where S is the proportion of net worth in the total capital.

Leverage Ratio

According to Table T.8.2., leverage ratios during the four-year period were: 1.2 in the first year, 1.4 in the second year, 1.8 in the third year and 2.1 in the fourth year. Thus, leverage ratios showed a steady rise during the period. This increase in leverage ratios is shown in Figure F.3.1.

Figure.F.8.1.: Leverage Ratios in the Capital
Structure of New Companies

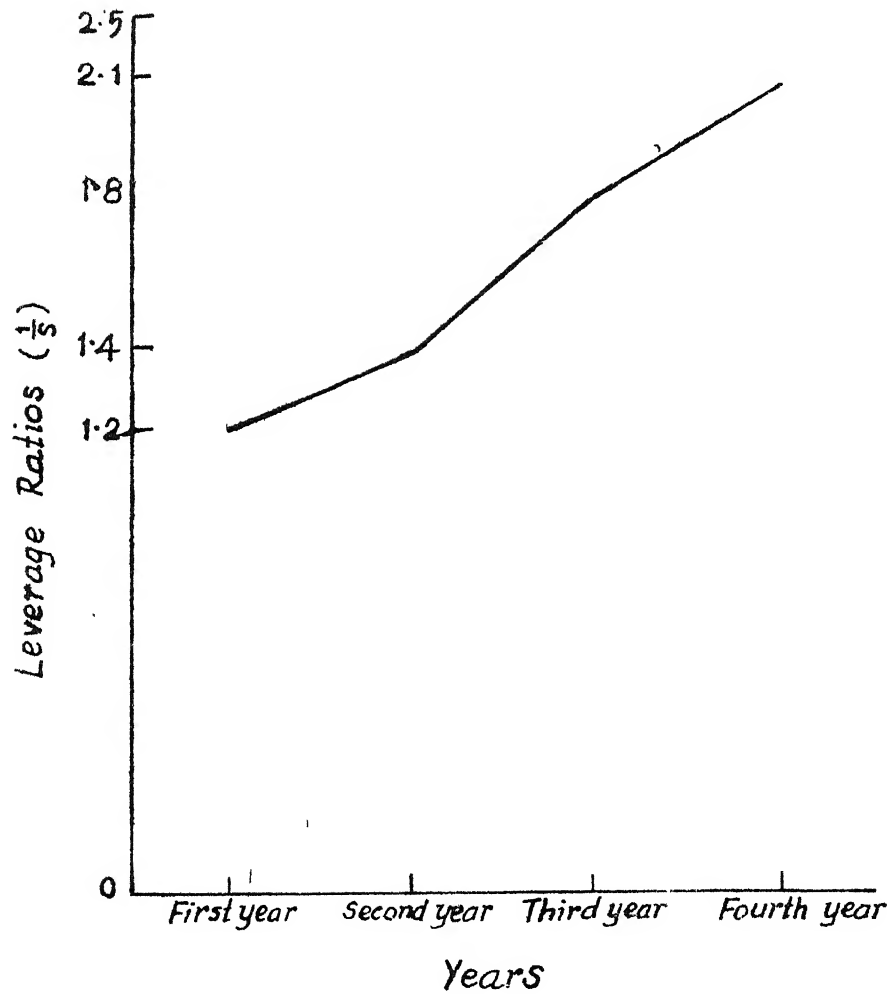


Table T.8.2. and Figure F.8.1. indicate that the leverage ratios in the first two years were smaller presumably because of two reasons: One, companies were building up equity base, and, two, small financing needs in these earlier years might have rendered borrowings before the start of operations unnecessary. But in the last two years, the leverage ratios increased significantly. In the fourth year, for instance, the amount of debt was in excess of shareholders net worth. This excess was caused by higher percentage increase in short-term and long-term loans. Such increase in leverage ratios might be peculiar to new companies. In their case, capital needs are high but raising of large amounts of capital through equity issues is generally not resorted to by companies. Capital market conditions also do not permit raising of large amount of capital through equity shares. However, with the passage of time as companies earn profits and retain a part of them, the leverage ratio is likely to come down to a normal level indicated by a bigger sample of existing companies.*

*For instance, in 1963-64, the debt-equity ratio for 1333 more matured companies was 1:3.2. By applying $\frac{1}{8}$ to measure the leverage ratio, the figure comes to 1.3. But this ratio excludes short-term loans from (Cont.)

A company might like to raise capital through debt mainly because of two possible reasons: it might like to take advantage of increased leverage in order to raise earnings per share, or it might borrow because it is not able to raise enough capital through equity sources. In the early years of operations of a company, increased earnings per share might not be the immediate objective of the borrowings. During these years, the profitability is usually very low and, therefore, the use of leverage in raising eps might not be very meaningful. Still they might prefer increased leverage from long-term point of view. However, use of borrowed capital as a matter of necessity might be more dominant consideration in early years. Conditions in capital markets in India do not provide opportunities for raising very large proportion of capital through ordinary shares.

debts and includes preference shares in equity. After these adjustments, the debt-equity ratio comes to 1:1.2 and the leverage ratio to 1.8 (calculated from the combined balance-sheet of 1333 companies for 1963-64) cf. 'Finances of Indian Joint Stock Companies, 1963-64', Reserve Bank of India Bulletin, November 1965. Table 13. pp. 1706-7.

For those companies which are neither backed by reputed promoters nor clearly suggest bright future prospects, the raising of risk capital might be very difficult. Ordinarily, companies might like to fill up the gap through debt capital.

Short-Term Loans

Figures appearing in Table T:8.2. indicate that the short-term loans increased in percentages as well as in absolute amounts during the period. The percentages of short-term loans were: 5.6 per cent in the first year, 5.1 per cent in the second year, 10.4 per cent in the third year and 15.8 per cent in the fourth year.

In the first two years, the percentages of short-term loans were low presumably because of small working capital requirements and absence of suitable securities to pledge against these loans. With change in these two factors, the percentages went up during third and fourth years.

The annual linear growth rate of short-term loans was 45.5 per cent during the period. This high rate of growth might be due to close relationship between short-term loans and working capital requirements.

on the one hand, and the working capital requirements and the level of operations on the other. Because of this relationship, short-term loans might further rise with increase in volume of operations in later years.*

Long-Term Loans

Figures appearing in Table T.8.2. indicate that the long-term loans increased absolutely as well as relatively during the four-year period. The percentages of long-term loans were: 2.1 per cent in the first year, 14.6 per cent in the second year, 26.4 per cent in the third year and 28.6 per cent in the fourth year. Thus, the percentages of long-term loans showed a steep rise in the second and third years but slowed down in the fourth year. The annual growth rate of long-term loans was 313 per cent during the four-year period. This high growth rate indicates that the percentages of long-term loans show a steep rise in the early years of a company's life.

*In case of 1333 more matured companies, the percentage of short-term loans in total capital was 21.2 in 1963-64. cf. Reserve Bank of India Bulletin, November, 1965. Table 13. p. 1706.

In the first year, the percentage of long-term loans was low presumably because of three reasons: one, fixed asset financing was small; two, equity base was in the process of being created; and, three, time lag involved in negotiating for long-term loans. In the second and third years, as these conditions changed, there was sharp rise in the percentages of long-term loans. But in the fourth year, the percentage increase in long-term loans slowed down presumably because: one, percentage increase in short-term loans; two, decrease in the rate of fixed asset financing; and, three, high degree of risk involved in further increase in leverage ratio.

Limited increase in the percentage of long-term loans in the fourth year might be indicative of their future trend. In future years, additional financing of fixed assets might decrease and that of current assets might increase with the increase in volume of operations. Under these conditions, the percentage of long-term loans might decrease relatively as against short-term loans.

*In 1963-64, the percentage of long-term loans in 1333 more matured companies was 18.7. cf. 'Finances of Indian Joint Stock Companies, 1963-64', Reserve Bank of India Bulletin, November 1965, Table 13. p.1706.

Preference Share Capital

Table T.8.2. indicates that during the four-year period, the percentages of preference share capital were: 8.7 per cent in the first year, 7.3 per cent in the second year, 8.6 per cent in the third year and 7.7 per cent in the fourth year. Thus, the percentages of preference share capital showed a decline but its absolute amount showed an increase during the period.

The percentages of preference share capital showed a decline during the period presumably because the percentages of short-term and long-term loans, which were small in the early years, increased faster in the later years of the period. This decrease in the percentages of preference share capital might indicate its future trend. In future years, increased working capital needs might lead to significant rise in short-term loans. Fixed asset financing and, therefore, the need for long-term capital might slow down. These might result in percentage decline in preference share capital. The percentage of preference share capital indicated by the Reserve Bank of India study is 4.8 for the year 1963-64. This can be assumed to be the normal figure. It is; therefore, reasonable to conclude

that the percentage of preference share capital for new companies under study might also come down to this level in future as these companies mature.*

Net Worth

Figures appearing in Table T.8.2. indicate that the percentages of net worth were: 83.6 per cent in the first year, 73.0 per cent in the second year, 54.6 per cent in the third year and 47.9 per cent in the fourth year. Thus the percentages of net worth declined at an annual rate of 10.7 per cent.

During first two years of the period, the percentages of net worth were very high because the percentages of debt capital were small. But in the last two years, the percentages of net worth declined significantly. This decline was due to large percentage increase in the debt capital.

*In 1963-64, the percentage of preference share

capital in 1933 more matured companies was 4.8. cf.

'Finances of Indian Joint Stock Companies, 1963-64',
Reserve Bank of India Bulletin, November 1965.

Table 13. p. 1706.

If the percentage of net worth for existing companies is taken as normal, the percentages of net worth in new companies were above the normal during first two years and below the normal during last two years of the period.* After some years of operation, the percentage of net worth in new companies is likely to move up to reach the normal figure. This is likely to happen with rise in volume of operations, profitability and retained earnings as these companies mature in future.

Relationship Between Fixed Assets and Long-Term Capital

Gross fixed assets as percentage of total gross assets of new companies were: 35.5 per cent in the first year, 61.6 per cent in the second year, 74.3 per cent in the third year and 67.1 per cent in the fourth year. On the other hand, long-term capital as percentage of total capitalization of these companies were: 87.4 per cent in the first year, 86.3 per cent

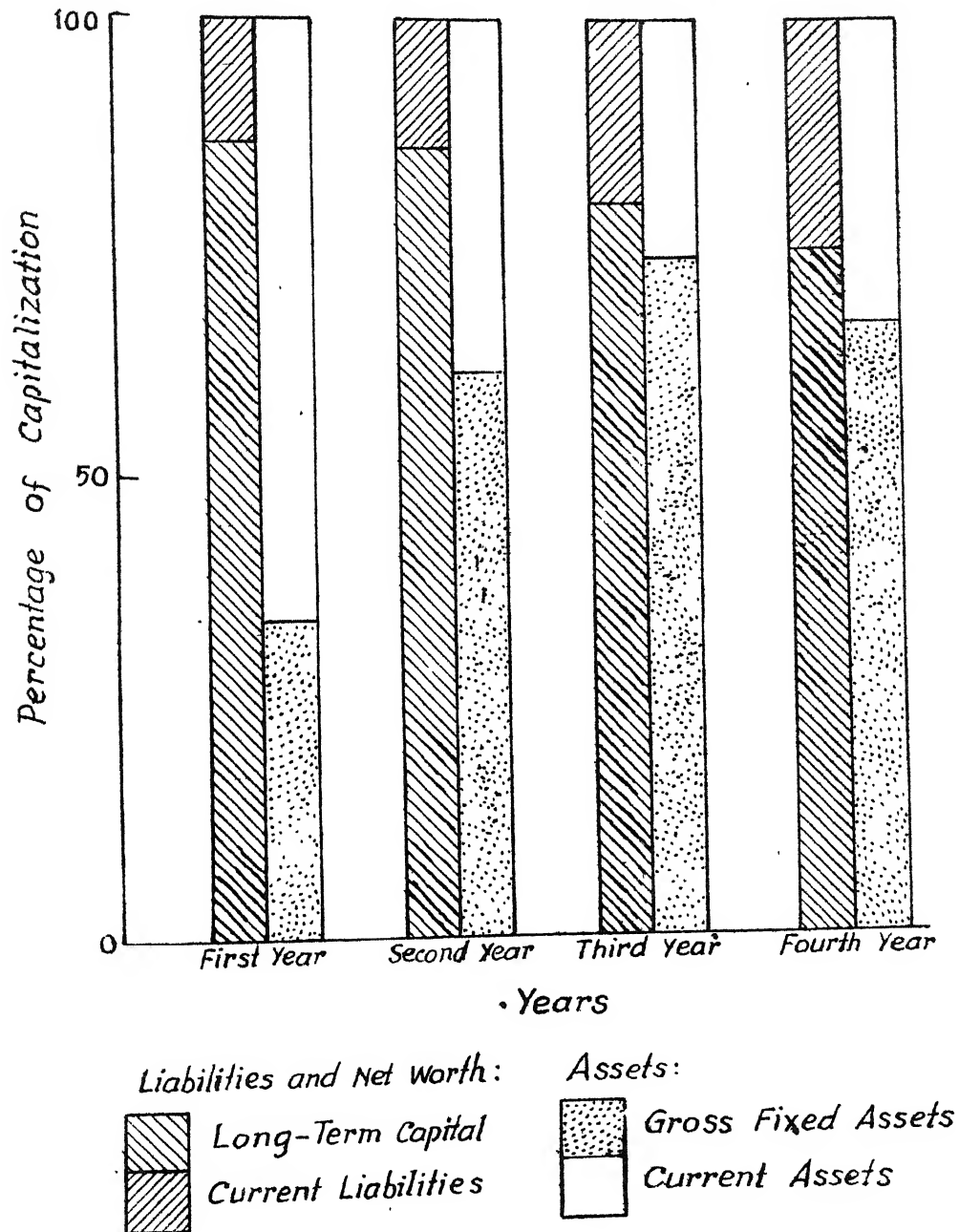
*In 1963-64, the percentage of net worth in 1333 more matured companies was 55.3. cf. 'Finances of Indian Joint Stock Companies, 1963-64', Reserve Bank of India Bulletin, November 1965. Table 13. p. 1706.

in the second year, 80.2 per cent in the third year and 74.6 per cent in the fourth year.* During the four-year period, long-term capital was more than the fixed asset investment. The difference between the two percentages was as high as 51 in the first year; but it narrowed down sharply during second, third and fourth years. This is more clearly shown in figure F.8.2.

In the first year the difference between long-term capital and fixed assets was very large presumably because of more time lag involved in the acquisition of fixed assets. In the second and third years, the difference between the two narrowed down as capital expenditure went up.

*Percentages have been calculated from Appendix A.1.

Figure.F.8.2.: Relationship Between Fixed Assets
and Long-Term Capital



In future current assets are likely to grow faster than fixed assets with the rise in volume of operations. Therefore, decrease in the percentage of fixed assets in the fourth year is perhaps indicative of its future trend. But the percentage of long-term capital might not fall significantly in future years because the increase in retained earnings might offset the increase in current liabilities. This conclusion regarding the percentage relationship between fixed assets and long-term capital also tallies with the relationship in more matured companies.*

Farther, in fifty seven new companies the coefficient of rank correlation between the size of fixed assets and long-term capital works out to + 0.98. This is indicative of high degree of positive correlation between long-term sources and uses of funds during the four-year period.

*In 1963-64, the percentages of gross fixed assets and long-term capital were 54.8 and 67.5 respectively in 1333 more matured companies. cf. 'Finances of Indian Joint Stock Companies, 1963-64', Reserve Bank of India Bulletin, November 1963. Table 13. p. 1706.

Thus, from the analysis of capital structure of all new companies during first four years of their existence, five conclusions emerge: One, the leverage ratios showed a steady rise during the period. In other words, new companies were started with small debt but by the end of the fourth year, the proportion of debt increased significantly. Two, short-term and long-term loans showed a steady rise during the period but the growth rate of long-term loans was higher as compared to growth rate of short-term loans. But as these companies mature further this trend is likely to get reversed. Three, the proportion of net worth showed a steady fall during the period. This again is likely to get changed in future. Fourt, long-term capital was greater than the gross fixed assets during all the years of the period. This trend is likely to continue. Five, there was a very high degree of positive correlation ($r = + 0.98$) between the size of fixed assets and the size of long-term capital in the fourth year of companies' existence.

Capital Structure According to Size of Companies

Out of total fifty seven new companies, there were fifteen small size companies (with total gross assets up to Rs. 50 lakhs at the end of fourth year), thirty seven medium size companies (with total gross assets between Rs. 51 lakhs to Rs. 500 lakhs at the end of fourth year) and ^{five} large size companies (with total gross assets above Rs. 500 lakhs at the end of fourth year). Table T.8.3. contains figures relating to aggregate balance-sheets and Table T.8.4. contains figures relating to capital structures of three types of companies.

Table T.8.3.: Aggregate Balance-Sheets of Small, Medium and Large Size Companies

	(Rs. in lakhs)											
	'Small' companies				'Medium' companies				'Large' companies			
	Years				Years				Years			
Liabilities and Net Worth	I	II	III	IV	I	II	III	IV	I	II	III	IV
Short-term loans	20	31	53	44	65	198	677	1049	6	-	66	526
Other current liabilities	22	21	29	36	105	329	653	817	2	116	141	371
Long-term loans	15	40	58	57	19	368	898	1149	-	250	1073	1731
Preference share capital	8	13	18	32	133	254	350	392	-	63	288	362
Net worth	110	133	147	172	11062	1790	2142	2627	180	1355	1900	2110
Total	175	238	305	341	11384	2939	4720	6034	188	1784	3468	5100
Assets												
Current assets	90	89	138	140	864	1003	1673	2666	173	805	389	1134
Fixed assets (net)	85	149	167	201	520	1936	3047	3368	15	979	3079	3966
Total	175	238	305	341	1384	2939	4720	6034	188	1784	3468	5100

Table T.8.4.: Capital structure of small, medium and large size companies

	(Rs. in lakhs)												
	Small companies			Medium companies			Large companies			Years			
	Years	I	II	III	IV	I	II	III	IV	I	II	III	IV
Short-term loans	20	31	53	44	65	123	677	1049		6 mil	66	523	
Long-term loans	15	40	53	57	19	363	893	1149		mil	250	1073	1731
Preference share capital	3	13	13	32	133	254	350	392		mil	63	233	362
Net worth Total	.43	34	120	133	217	820	1925	2590		6	313	1427	2519
	110	133	147	172	196	1791	2142	2527		134	1393	1929	2110
	113	117	126	135	147	1213	1437	1617		134	1663	2027	2123
	(Percentages)												
Short-term loans	13.1	14.3	19.2	14.4	5.1	7.6	16.6	20.1		3.1	11	2.0	11.1
Long-term loans	9.3	13.4	21.0	14.7	1.5	14.1	22.1	22.0		mil	15.0	32.2	35.0
Preference share capital	5.2	6.0	6.5	10.5	10.3	3.5	3.6	7.5		mil	3.3	6.7	7.6
Net worth Total	10.1	33.7	46.7	43.6	17.9	21.6	47.3	49.6		3.1	13.3	42.9	33.3
	71.3	61.2	57.3	53.4	43.2	68.3	52.7	59.4		26.2	21.2	27.1	24.7
	100	100	100	100	100	100	100	100		100	100	100	100

Leverage Ratios

Table T.8.5. contains figures relating to leverage ratios in three types of companies during the period.

Table T.8.5.: Leverage Ratios ($\frac{1}{S}$)*

Types of companies	Years			
	I	II	III	IV
Small size companies	1.39	1.63	1.88	1.77
Medium size companies	1.20	1.47	1.90	1.98
Large size companies	1.03	1.23	1.75	2.24

*Calculated from Table T.8.4.

Figures appearing in Table T.8.5. indicate that the leverage ratios were different in three types of companies during the four-year period. These ratios in three types of companies are more clearly shown in Figure F.8.3.

Figure.F.8.3: Leverage Ratios in Small,
Medium and Big Companies

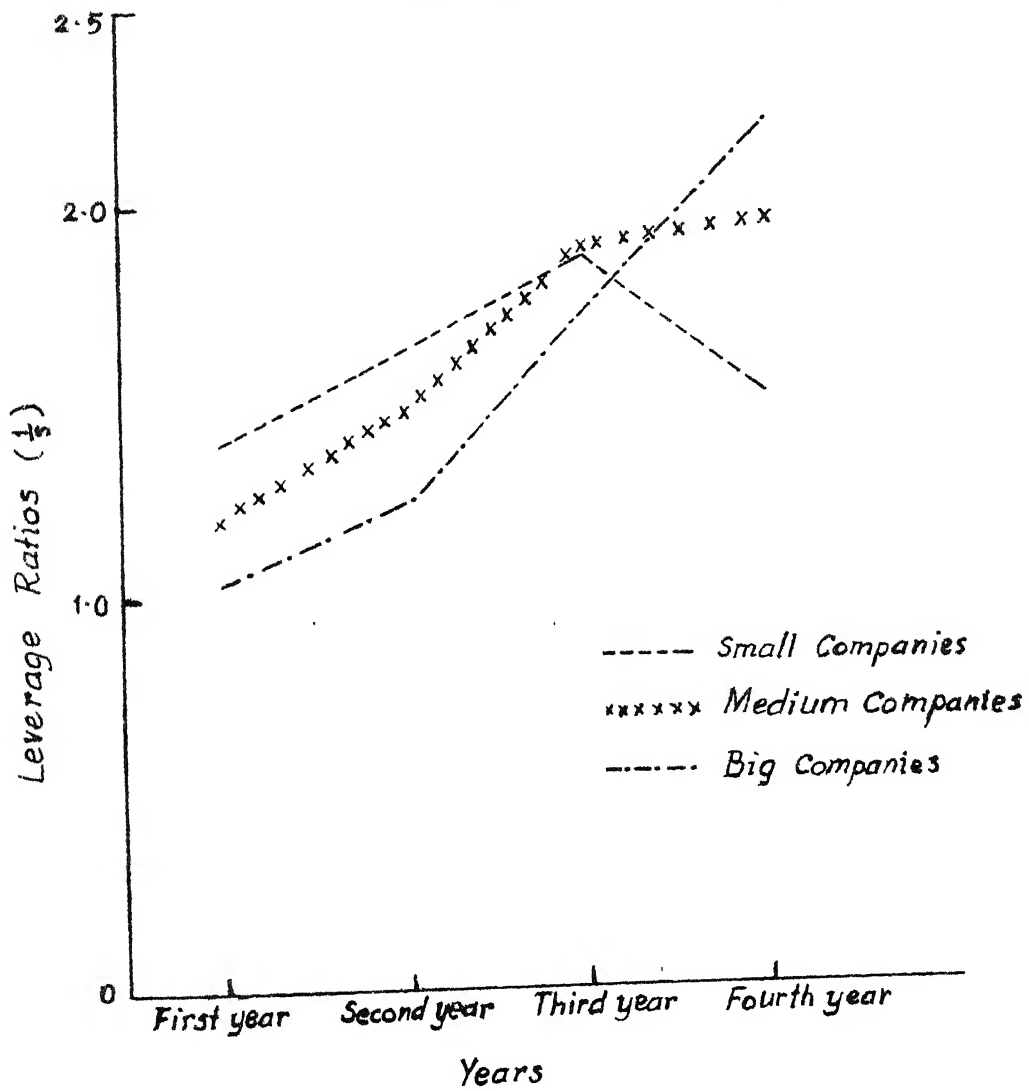


Table T.8.5. and Figure F.8.3. show that in small size companies, leverage ratios moved upward during first three years of the period and downward in the fourth year. In medium and large size companies, leverage ratios showed a steady rise but the rate increase slowed down in the fourth year in medium size companies. Linear growth rates of leverage ratios in small, medium and large size companies were 10.4 per cent, 16.2 per cent and 29.9 per cent per annum respectively.

As between small size companies on the one hand and medium and large size companies on the other, leverage ratios declined in the fourth year in the former case as against an increase in the latter case. In small size companies, decline in leverage ratio in the fourth year might be due to increase in retained earnings and additional issue of ordinary shares on the one hand and the repayment of short-term and long-term loans on the other.* But this trend might change in future with the decrease in additional share issues and increase in short-term loans.**

*Vide, Appendix A.3.

**In 1962-63, leverage ratio in 1015 small size public limited companies was 1.96 (against 1.80 in medium and large size companies, op. cit. p. 173). Though the
(Cont.)

As between medium and large size companies, increase in leverage ratio slowed down in the fourth year in medium size companies as against uniform increase in large size companies in this year. This might be due to increase in retained profits and slowing down of long-term borrowing in the fourth year in medium size companies.* But in large size companies, need to finance fixed and current assets continued to be high.** Because

basis of classification of companies into different size groups is different in two studies, it can be taken as indicative of leverage ratios in small companies. cf. 'Finances of Small Public Limited Companies, 1962-63', Reserve Bank of India Bulletin, October 1964. Table 5. p. 1255.

*Vide, Appendix A.6.

**Rate of Increases in Gross Assets (Percentages)

Type of companies	I year	II year	III year	IV year
Small companies	36	32	16	
Medium companies	41	65	32	
Large companies	850	98	52	

Note: Calculated from Appendices A.3., A.6. and A.9.

of large foreign exchange requirement in their case, increased percentages of long-term loans were raised from foreign collaborators and other foreign agencies.* Large percentage of these loans might have caused a decline in the proportion of net worth. Besides, these companies contracted short-term loans in order to meet increased current asset requirements in the fourth year. Thus, high percentage increase in debt capital raised leverage ratios in large size companies during the four-year period.

It emerges, therefore, that the size is an important factor in influencing the leverage ratios in the early years of a company's life. In small size companies, increase in leverage ratios might stop earlier as compared to medium and large size companies. Further, leverage ratios might rise higher in large size companies as against small and medium size companies in the early years. However, medium size companies took the middle position.

Short-Term Loans

The percentages of short-term loans in the capital structures of small, medium and large size

*Vide, Appendix A.9.

companies were: 13.1 per cent in the first year, 14.3 per cent in the second year, 19.2 per cent in the third year and 14.4 per cent in the fourth year in small companies; 5.1 per cent in the first year, 7.6 per cent in the second year, 16.6 per cent in the third year and 20.1 per cent in the fourth year in medium companies; and 3.1 per cent in the first year, nil in the second year, 2.0 per cent in the third year and 11.1 per cent in the fourth year in large companies. Thus, small size companies started with higher percentage of short-term loans. They declined in the fourth year. Medium size companies increased the percentages of short-term loans in the third and fourth years. Large size companies increased this percentage in the fourth year.

As between medium and large size companies on the one hand and small size companies on the other, small size companies raised higher percentage of short-term loans in the first year presumably because many of these companies with shorter gestation period might have increased operations in this year. In the fourth year, the percentage of short-term loans declined in small size companies. This decline might be attributed to increase in retained profits and fresh issue of ordinary and preference shares on the one hand, and repayment of

short-term loans on the other.* This percentage (14.4) might again increase in future with larger bank loans and smaller share issues.**

As between medium and large size companies, medium companies raised higher percentage of short-term loans in the third year; in the fourth year the rate of increase slowed down. It might be due to increase in operations in the third year causing increased percentage of short-term loans. This increase continued in the fourth year and the percentage (20.1) reached almost to normal level obtained by more matured companies.*** But large companies with longer gestation period might have started operations in the fourth year. Therefore, the percentage of short-term loans during first three years remained limited in their case. The percentage of short-term loans might rise in future with the increase

*Vide, Appendix A.3.

**In 1962-63, the percentage of short-term loans in 1015 small companies was 20.3. cf. 'Finances of Small Public Limited Companies, 1962-63', Reserve Bank of India Bulletin, October 1964. Table 5. p. 1255.

***21.2 per cent. cf. Reserve Bank of India Bulletin, November 1965. op. cit. p. 176.

in volume of operations in large size companies.

Thus, small size companies raised higher percentage of short-term loans earlier than medium and large size companies. This increase continued up to third year and it declined in the fourth year. Medium size companies raised higher percentage of short-term loans in the third year but the rate of increase slowed down in the fourth year. Large size companies speeded up the increase in the percentage of short-term loans in the fourth year indicating further increase in future with the increase in volume of operations.

Long-Term Loans

The percentages of long-term loans in the capital structures of small, medium and large size companies were: 9.3 per cent in the first year, 18.4 per cent in the second year, 21.0 per cent in the third year and 18.7 per cent in the fourth year in small size companies; 1.5 per cent in the first year, 14.2 per cent in the second year, 22.1 per cent in the third year and 22.0 per cent in the fourth year in medium size companies; and nil in the first year, 15.0 per cent in the second year, 32.2 per cent in the third year and 36.6 per cent in the fourth year in large size companies.

As against medium and large size companies put together, small size companies started with higher percentage of long-term loans. This might be due to the fact that the payments for fixed assets might have come up earlier in their case.

As against an increase in large size companies, the percentage of long-term loans in small and medium size companies declined in the fourth year. This again might be due to the fact that small and medium size companies might have started paying for fixed assets earlier and by the end of third year additional financing of fixed assets might have slowed down causing decrease in the percentage of long-term loans in the fourth year. But in case of large size companies, the percentage of long-term loans continued to rise presumably because they paid for fixed assets after a longer gap.

Further, as between small and medium size companies, the percentages of long-term loans were higher in small size companies during first two years of the period. They were higher in medium size companies during last two years of the period. The percentage (18.7) for small size companies might rise in future. Additional financing through ordinary shares by small size companies in the

fourth year might provide an opportunity to them in future to finance further needs through long-term loans.

Thus it can be concluded that small size companies started with higher percentage of long-term loans which declined in the fourth year. Medium size companies raised the percentage of long-term loans in the second year, which declined in the fourth year. Large size companies showed a steady rise in the percentage of long-term loans during the period. The time lag involved in acquiring the fixed assets in three types of companies might be an important factor influencing the trend of long-term loans in the early years.

Preference Share Capital

Table T.8.4. indicates that the percentages of preference share capital in small, medium and large size companies were: 5.2 per cent in the first year, 6.0 per cent in the second year, 6.5 per cent in the third year

*1. Vide, Appendix A.3.

2. In 1962-63, the percentage of long-term loans in 1015 small public limited companies was 26.7. cf. 'Finances of Small Public Limited Companies, 1962-63', Reserve Bank of India Bulletin, October 1964. Table 5. p.1255.

and 10.5 per cent in the third year in small companies; 10.4 per cent in the first year, 9.8 per cent in the second year, 8.6 per cent in the third year and 7.5 per cent in the fourth year in medium companies; and nil in the first year, 3.8 per cent in the second year, 8.7 per cent in the third year and 7.6 per cent in the fourth year in large companies. Thus, during the four year period, the percentages of preference share capital showed a steady rise in small size companies; steady decline in medium size companies; and an increase in the second and third years and a decrease in the fourth year in large size companies.

Steady rise in the percentages of preference share capital in small size companies might be because they found it easier to raise long-term capital through preference shares than through other sources. But this percentage (10.5) might sharply decline in future with further increase in retained profits and the ability of these companies to produce good securities for contracting short-term and long-term loans.*

*In 1962-63, the percentage of preference share capital in 1015 small public limited companies was 2.0. cf.

'Finances of Small Public Limited Companies, 1962-63',
Reserve Bank of India Bulletin, October 1964. Table 5.
p. 1255.

Steady decline in the percentages of preference share capital in medium size companies and the percentage decline in the fourth year in large size companies might be indicative of their future trend.*

Net Worth

The percentages of net worth in the capital structures of small, medium and large size companies were: 71.9 per cent in the first year, 61.3 per cent in the second year, 53.3 per cent in the third year and 56.4 per cent in the fourth year in small size companies; 83.0 per cent in the first year, 68.5 per cent in the second year, 52.7 per cent in the third year and 50.4 per cent in the fourth year in medium size companies; and 96.9 per cent in the first year, 81.2 per cent in the second year, 57.1 per cent in the third year and 44.7 per cent in the fourth year in large size companies. The annual rates of decreases were: 5.4 per cent, 9.8 per cent and 13.5 per cent in small, medium and large size companies respectively.

*In 1963-64, the percentage of preference share capital in 1333 medium and large companies was 4.8. cf.

'Finances of Indian Joint Stock Companies, 1963-64'

Reserve Bank of India Bulletin, November 1965. Table 13.

p. 1706.

As against steady fall in the percentages of net worth in medium and large size companies, the percentages of net worth decreased during first three years and increased in the fourth year in small size companies. Increase in retained profits and fresh issue of ordinary shares on the one hand and a decline in short-term and long-term loans on the other might have caused an increase in the percentage of net worth of small size companies in the fourth year.* This percentage (56.4) might move downward in future with an increase in loans and decrease in additional issue of ordinary shares, and thus reach nearer to normal level indicated by more matured companies.**

In medium and large size companies, the percentage decline in net worth slowed down in the fourth year. However, the percentage decline was smaller in case of medium size companies.*** This was caused largely on

* Vide, Appendix A.3.

**In 1962-63, the percentage of net worth in 1015 small public limited companies was 51.0. cf. Reserve Bank of India Bulletin, 1964. Table 5. p.1255.

***In medium companies, the percentage decline in the net worth was 4.3 per cent in the fourth year and 23.1 per cent in the third year; in large companies, it was 21.7 per cent in the fourth year against 30 per cent in the third year. cf. Table T.8.4., supra.

account of rise in short-term loans in these companies. But in large size companies, since the percentages of both long-term and short-term loans continued to rise in the fourth year, the percentage of net worth declined more sharply in these companies in the fourth year.*

Small decrease in the percentage of net worth in the fourth year might indicate that in medium size companies, the percentage of net worth might move upward in future to reach normal figure. But large size companies might take longer time to reach normal level indicated by more matured companies.**

Thus, in the fourth year the percentage of net worth was higher in small size companies as compared to medium and large size companies. But in future, this position might get reversed presumably because the percentages of retained profits are large in medium and large size companies as compared to small size companies.***

*Vide Table T.8.4., and Appendices A.6 and A.9.

**55.3 per cent. cf. Reserve Bank of India Bulletin, November 1965. Table 13. p. 1706. op. cit. p.180.

***In 1962-63, profits retained as percentage of profits after tax were 15.7 per cent in 1015 small companies and 36.2 per cent in medium and large companies, cf. 'Finances of Small Public Limited Companies, 1962-63', Reserve Bank of India Bulletin, October 1964. Table 8. p. 1259.

Above analysis of capital structures of small, medium and large size companies leads to three conclusions: One, in the fourth year, leverage ratios showed an upward trend in medium and large size companies and downward in small companies. But these ratios might get changed in future, with faster increase in retained earnings in medium and large companies and faster increase in short-term and long-term loans in small size companies, as indicated by the capital structure of more matured companies.* Two, because of differences in gestation periods in three types of companies, percentages of short-term and long-term loans went up earlier in small size companies, followed by medium and large size companies. By the end of the fourth year, the percentages of long-term loans started declining in small and medium size companies; they might decline further in future in large size companies also. Three, all the three types of companies started with high percentages of net worth, but it was highest in large size companies, followed by

*Retained profits as percentage of profit after tax were 15.7 per cent in small companies and 36.2 per cent in medium and large companies. cf. Reserve Bank of India Bulletin, October 1964. Table 8. p. 1259. op. cit. p. 201.

medium and small size companies. By the end of the fourth year, this position got reversed and small size companies had the highest percentage of net worth, followed by medium and large size companies. The percentages of net worth might again rise in future in medium and large size companies and decline in small size companies in order to reach the normal.

Thus, size of companies is an important factor causing differences in their capital structures in early years of operation.

Part Four

Appendices

Appendix A.1.: Consolidated Balance-Sheet of All New Companies

(Rs. in lakhs)				
Liabilities and Net Worth				
	I	Years II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	50	163	533	1294
Loans from others	41	66	213	325
Trade creditors	94	233	510	801
Provision for tax	10	40	34	100
Other current liabilities	25.6	143	279	323
	<u>220.6</u>	<u>695</u>	<u>1619</u>	<u>2343</u>
<u>Long-Term Loans:</u>				
Debentures	10	11	10	95
Bank mortgages	-	85	310	386
Loans from finance Corpsns.	18	280	424	418
Fixed deposits	2	12	31	41
Loans from Government	-	20	31	31
Other long-term loans	4	250	1223	1966
	<u>34</u>	<u>658</u>	<u>2029</u>	<u>2937</u>
<u>Capital and Surplus:</u>				
Ordinary share capital	1432.7	3400	4315	5073
Cr. balance of P&L a/c	9	18	11	17
Capital reserve	-	-	15	62
General and other reserves	-	10	26	109
Development rebate reserves	6	20	123	200
Preference share capital	141	330	656	786
	<u>1588.7</u>	<u>3778</u>	<u>5151</u>	<u>6247</u>
Grand Total	1843.3	5131	9799	12027

Appendix A.1.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	Years			
	I	II	III	IV
<u>Current Assets:</u>				
Inventories	121	399	1189	2082
Sundry debtors	24	94	186	439
Cash and bank balances	634.7	985	410	620
Loans and advances	332	341	355	788
Other current assets	16	78	60	14
	<u>1127.7</u>	<u>1897</u>	<u>2200</u>	<u>3940</u>
<u>Fixed Assets:</u>				
Gross fixed assets	622	3074	6431	8086
Less depreciation	3	39	164	577
Net fixed assets	619	3045	6267	7509
Investments	1	19	26	26
	<u>620</u>	<u>3064</u>	<u>6293</u>	<u>7535</u>
<u>Loss and Expenses:</u>				
Losses	28	45	182	424
Deferred expenses	67.6	125	124	128
	<u>95.6</u>	<u>170</u>	<u>306</u>	<u>552</u>
Grand Total	1843.3	5731	8799	12027

- Note: (1) Other current liabilities include:
unclaimed dividends, unpaid wages and
other current liabilities not classified
elsewhere.
- (2) Other long-term loans include: long-term
loans from managing agents, managing
directors, secretaries and treasurers,
U.S.A.I.D., Worl Bank, Export-Import
Bank, foreign collaborators and other
long-term loans not classified elsewhere.
- (3) Other current assets include: marketable
securities and other current assets not
classified elsewhere.
- (4) Investments relate to long-term investments
which are not meant for re-sale, viz.,
inter-company investments.

Appendix A.2.: Statement of Balance-Sheet Changes of New Companies

(Rs. in lakhs)				
<u>Liabilities and Net Worth</u>				
	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	50	113	420	711
Loans from others	41	25	147	112
Trade creditors	94	189	227	291
Provision for tax	10	30	6	66
Other current liabilities	25.6	117.4	136	44
	<u>220.6</u>	<u>474.4</u>	<u>924</u>	<u>1244</u>
<u>Long-Term Loans:</u>				
Debentures	10	1	1	85
Bank mortgages	nil	85	225	76
Loans from finance Corpsns.	18	262	144	6
Fixed deposits	2	10	19	10
Loans from Government	nil	20	11	nil
Other long-term loans	4	246	973	743
	<u>34</u>	<u>624</u>	<u>1371</u>	<u>908</u>
<u>Capital and Surplus:</u>				
Ordinary share capital	1432.7	1967.3	915	758
Cr. balance of P&L a/c	9	9	7	6
Capital reserve	nil	nil	15	47
General and other reserves	nil	10	16	83
Development rebate reserves	6	14	108	72
Preference share capital	141	189	326	130
	<u>1588.7</u>	<u>2189.3</u>	<u>1373</u>	<u>1096</u>
Grand Total	<u>1843.3</u>	<u>3288.7</u>	<u>3668</u>	<u>3228</u>

Appendix A.2.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	Years			
	I	II	III	IV
<u>Current Assets:</u>				
Inventories	121	278	790	893
Sundry debtors	24	70	92	253
Cash and bank balances	634.7	350.3-	575	210
Loans and advances	332.1	9	14	430
Other current assets	16	62	- 18	- 46
	1127.8	769.3	303	1740
<u>Fixed Assets:</u>				
Gross fixed assets	622	2452	3357	1655
Less depreciation	3	26	135	413
Net fixed assets	619	2426	3222	1242
Investments	1	18	7	nil
	620	2444	3239	1242
<u>Loss and Expenses:</u>				
Losses	28	17	137	242
Deferred expenses	67.5	57.5	- 1	4
	95.5	74.5	136	246
Grand Total	1843.3	3286.8	3669	3228

Appendix A.3.: Consolidated Balance-Sheet of
Small size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	5	11	27	23
Loans from others	15	20	26	21
Trade creditors	12	12	11	19
Provision for tax	2	2	3	6
Other current liabilities	8	7	15	11
	42	52	82	80

Long-Term Loans:

Debentures	10	11	10	10
Bank mortgages	nil	nil	nil	nil
Loans from finance Corpsns.	2	23	40	38
Fixed deposits	1	3	5	9
Loans from Government	nil	nil	nil	nil
Other long-term loans	2	3	3	nil
	15	40	58	57

Capital and Surplus:

Ordinary share capital	120	151	166	185
Cr. balance of P&L a/c	nil	nil	2	2
Capital reserve	nil	nil	nil	1
General and other reserves	nil	nil	nil	2
Development rebate reserves	1	1	5	7
Preference share capital	8	13	18	32
	129	165	191	229
Grand Total	186	257	331	366

Appendix A.3.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	I	Years II	III	IV
<u>Current Assets:</u>				
Inventories	23	35	64	58
Sundry debtors	1	3	8	14
Cash and bank balances	37	39	38	32
Loans and advances	28	12	28	36
Other current assets	1	nil	nil	nil
	90	89	138	140
<u>Fixed Assets:</u>				
Gross fixed assets	85	154	182	229
Less depreciation	nil	5	15	28
Net fixed assets	85	149	167	201
Investments	nil	nil	nil	nil
	85	149	167	201
<u>Loss and Expenses:</u>				
Losses	7	14	19	19
Deferred expenses	4	5	7	6
	11	19	26	25
Grand Total	186	257	331	366

Appendix A.4.: Statement of Balance-Sheet Changes
of Small size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	5	6	16	- 4
Loans from others	15	5	6	- 5
Trade creditors	12	nil	- 1	8
Provision for tax	2	nil	1	3
Other current liabilities	8	- 1	8	- 4
	42	10	30	- 2
<u>Long-Term Loans:</u>				
Debentures	10	1	- 1	nil
Bank mortgages	nil	nil	nil	nil
Loans from finance Corpsns.	2	21	17	- 2
Fixed deposits	1	2	2	4
Loans from Government	nil	nil	nil	nil
Other long-term loans	2	1	nil	- 3
	15	25	18	- 1
<u>Capital and Surplus:</u>				
Ordinary share capital	120	31	15	19
Cr. balance of P&L a/c	nil	nil	2	nil
Capital reserve	nil	nil	nil	1
General and other reserves	nil	nil	nil	2
Development rebate reserves	1	nil	4	2
Preference share capital	8	5	5	14
	129	36	26	38
Grand Total	186	71	74	35

Appendix A.4.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	Years			
	I	II	III	IV
<u>Current Assets:</u>				
Inventories	23	12	29	- 6
Sundry debtors	1	2	5	6
Cash and bank balances	37	2	- 1	- 6
Loans and advances	28	- 16	16	8
Other current assets	1	- 1	nil	nil
	90	- 1	49	2
<u>Fixed Assets:</u>				
Gross fixed assets	85	69	28	47
Less depreciation	nil	5	10	13
Net fixed assets	85	64	18	34
Investments	nil	nil	nil	nil
	85	64	18	34
<u>Loss and Expenses:</u>				
Losses	7	7	5	nil
Deferred expenses	4	1	2	- 1
	11	8	7	- 1
Grand Total	186	71	74	35

Appendix A.5.: Summarized Fund Flow Statement of
Small size Companies

	(Rs. in lakhs)			
	Years			
	I	II	III	IV
<u>SOURCES OF FUNDS</u>				
<u>Internal Sources</u>				
Depreciation	nil	5	10	13
Development Rebate Reserve	1	nil	4	2
Reserves, Provisions and Surpluses	2	nil	3	6
Other Internal Sources	nil	17	1	13
	3	22	18	34
<u>External Sources</u>				
Share Issues	128	36	20	33
Long-Term Debts	15	25	19	4
Short-Term Debts	40	11	30	8
	183	72	69	45
Total Sources	186	94	87	79
<u>USES OF FUNDS</u>				
<u>Current Uses</u>				
Inventories	23	12	29	nil
Sundry Debtors	1	2	5	6
Cash and Bank Balances	37	2	nil	nil
Other Current Uses	29	nil	16	8
	90	16	50	14
<u>Fixed Uses</u>	85	69	28	47
<u>Other Unclassified Uses</u>	11	9	9	18
Total Uses	186	94	87	79

Appendix A.6.: Consolidated Balance-Sheet of
Medium Size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	45	152	509	808
Loans from others	20	46	168	241
Trade creditors	82	230	411	494
Provision for tax	7	33	29	94
Other current liabilities	16.5	66	213	229
	170.5	527	1330	1366
<u>Long-Term Loans:</u>				
Debentures	nil	nil	nil	85
Bank mortgages	nil	85	293	336
Loans from finance Corpsns.	16	207	334	335
Fixed deposits	1	9	26	32
Loans from Government	nil	20	31	31
Other long-term loans	2	47	214	330
	19	368	898	1149
<u>Capital and Surplus:</u>				
Ordinary share capital	1118.7	1844	2200	2547
Cr. balance of P&L a/c	9	12	5	8
Capital reserve	nil	nil	9	50
General and other reserves	nil	10	26	107
Development rebate reserve	5	19	121	191
Preference share capital	133	254	350	392
	1265.7	2139	2711	3295
Grand Total	1455.2	3034	4939	6310

Appendix A.6.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	Years			
	I	II	III	IV
<u>Current Assets:</u>				
Inventories	98	346	995	1537
Sundry debtors	23	91	173	417
Cash and bank balances	564.7	367	237	410
Loans and advances	164	164	233	289
Other current assets	15	35	35	13
	864.7	1003	1673	2666
<u>Fixed Assets:</u>				
Gross fixed assets	522	1956	3185	3742
Less depreciation	3	24	149	385
Net fixed assets	519	1932	3036	3357
Investments	1	4	11	11
	520	1936	3047	3368
<u>Losses and Expenses:</u>				
Losses	19	31	158	210
Deferred expenses	51.5	64	61	66
	70.5	95	219	276
Grand Total	1455.2	3034.	4939	6310

Appendix A.7.: Statement of Balance-Sheet Changes
of Medium Size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	45	107	357	299
Loans from others	20	26	122	73
Trade creditors	82	148	181	83
Provision for tax	7	26	4	65
Other current liabilities	16.5	49.5	147	16
	170.5	356.5	803	536
<u>Long-Term Loans:</u>				
Debentures	nil	nil	nil	85
Bank mortgages	nil	85	208	43
Loans from finance Corpsns.	16	191	127	1
Fixed deposits	1	8	17	6
Loans from Government	nil	20	11	nil
Other long-term loans	2	45	167	116
	19	349	530	251
<u>Capital and Surplus:</u>				
Ordinary share capital	1118.7	725.3	356	347
Cr. balance of P&L a/c	9	3	7	3
Capital reserve	nil	nil	9	41
General and other reserves	nil	10	16	81
Development rebate reserve	5	14	102	70
Preference share capital	133	121	96	42
	1265.7	873.3	572	584
Grand Total	1455.2	1578.8	1805	1371

Appendix A.7.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	I	Years II	III	IV
<u>Current Assets:</u>				
Inventories	98	248	649	542
Sundry debtors	23	68	82	244
Cash and bank balances	564.7	- 177.7-	130	173
Loans and advances	164	nil	69	56
Other current assets	15	20	nil	22
	864.7	138.3	870	993
<u>Fixed Assets:</u>				
Gross fixed assets	522	1434	1229	557
Less depreciation	3	21	125	236
Net fixed assets	519	1413	1104	321
Investments	1	3	7	nil
	520	1416	1111	321
<u>Losses and Expenses:</u>				
Losses	19	12	127	52
Deferred expenses	51.5	12.5-	3	5
	70.5	24.5	124	57
Grand Total	1455.2	1578.8	1905	1371

Appendix A.8.: Summarized Fund Flow Statement of
Medium Size Companies

	(Rs. in lakhs)			
	Years			
	I	II	III	IV
<u>SOURCES OF FUNDS</u>				
<u>Internal Sources</u>				
Depreciation	3	21	125	236
Development Rebate Reserve	5	14	102	70
Reserves, Provisions and Surpluses	16	39	25	190
Other Internal Sources	nil	198	133	22
	24	272	385	518
<u>External Sources</u>				
Share Issues	1252	846	452	389
Long-Term Debts	19	349	530	251
Short-Term Debts	163	330	807	471
	1434	1525	1789	1111
Total Sources	1458	1797	2174	1629
<u>USES OF FUNDS</u>				
<u>Current Uses</u>				
Inventories	98	248	649	542
Sundry Debtors	23	68	82	244
Cash and Bank Balances	565	nil	nil	173
Other Current Uses	179	20	69	56
	865	336	800	1015
<u>Fixed Uses</u>	523	1437	1236	557
<u>Other Unclassified Uses</u>	70	24	138	57
Total Uses	1458	1797	2174	1629

Appendix A.9.: Consolidated Balance-Sheet of Large Size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	nil	nil	47	463
Loans from others	6	nil	19	63
Trade creditors	nil	41	88	238
Provision for tax	1	5	2	nil
Other current liabilities	1	70	51	83
	8	116	207	397
<u>Long-Term Loans:</u>				
Debentures	nil	nil	nil	nil
Bank mortgages	nil	nil	17	50
Loans from finance Corpsns.	nil	50	50	45
Fixed deposits	nil	nil	nil	nil
Loans from Government	nil	nil	nil	nil
Other long-term loans	nil	200	1006	1636
	nil	250	1073	1731
<u>Capital and Surplus:</u>				
Ordinary share capital	194	1405	1949	2341
Cr. balance of P&L a/c	nil	6	4	7
Capital reserve	nil	nil	6	11
General and other reserves	nil	nil	nil	nil
Development rebate reserve	nil	nil	2	2
Preference share capital	nil	63	233	362
	194	1474	2249	2723
Grand Total	202	1840	3529	5351

Appendix A.9.: (Continued)

(Rs. in lakhs)				
Assets and Losses				
	I	Years II	III	IV
<u>Current Assets:</u>				
Inventories	nil	18	130	437
Sundry debtors	nil	nil	5	8
Cash and bank balances	33	579	135	178
Loans and advances	140	165	94	460
Other current assets	nil	43	25	1
	173	805	389	1134
<u>Fixed Assets:</u>				
Gross fixed assets	15	964	3064	4115
Less depreciation	nil	nil	nil	164
Net fixed assets	15	964	3064	3951
Investments	nil	15	15	15
	15	979	3079	3966
<u>Losses and Expenses:</u>				
Losses	2	nil	5	195
Deferred expenses	12	56	56	56
	14	56	61	251
Grand Total	202	1840	3529	5351

Appendix A.10.: Statement of Balance-Sheet Changes
of Large Size Companies

(Rs. in lakhs)

Liabilities and Net Worth

	Years			
	I	II	III	IV
<u>Current Liabilities:</u>				
Loans from banks	nil	nil	47	416
Loans from others	6	- 6	19	44
Trade creditors	nil	41	47	200
Provision for tax	1	4	- 3	- 2
Other current liabilities	1	69	- 19	32
	8	108	91	690
<u>Long-Term Loans:</u>				
Debentures	nil	nil	nil	nil
Bank mortgages	nil	nil	17	33
Loans from finance Corpsns.	nil	50	nil	- 5
Fixed deposits	nil	nil	nil	nil
Loans from Government	nil	nil	nil	nil
Other long-term loans	nil	200	806	630
	nil	250	823	658
<u>Capital and Surplus:</u>				
Ordinary share capital	194	1211	544	392
Cr. balance of P&L a/c	nil	6	- 2	3
Capital reserve	nil	nil	6	5
General and other reserves	nil	nil	nil	nil
Development rebate reserve	nil	nil	2	nil
Preference share capital	nil	63	225	74
	194	1280	775	474
Grand Total	202	1638	1689	1822

Appendix A.10.: (Continued)

(₹. in lakhs)				
Assets and Losses				
	I	Years II	III	IV
<u>Current Assets:</u>				
Inventories	nil	18	112	357
Sundry debtors	nil	nil	5	3
Cash and bank balances	33	546	- 444	43
Loans and advances	140	25	- 71	366
Other current assets	nil	43	- 18	- 24
	173	632	- 416	745
<u>Fixed Assets:</u>				
Gross fixed assets	15	949	2100	1051
Less depreciation	nil	nil	nil	164
Net fixed assets	15	949	2100	887
Investments	nil	15	nil	nil
	15	964	2100	887
<u>Losses and Expenses:</u>				
Losses	2	- 2	5	190
Deferred expenses	12	44	nil	nil
	14	42	5	190
Grand Total	202	1638	1689	1822

Appendix A.11.: Summarized Fund Flow Statement of Large Size Companies

	(Rs. in lakhs)			
	Years			
	I	II	III	IV
<u>SOURCES OF FUNDS</u>				
<u>Internal Sources</u>				
Depreciation	nil	nil	nil	164
Development Rebate Reserve	nil	nil	2	nil
Reserves, Provisions and Surpluses	1	10	6	8
Other Internal Sources	nil	2	533	24
	<u>1</u>	<u>12</u>	<u>541</u>	<u>196</u>
<u>External Sources</u>				
Share Issues	194	1274	769	466
Long-Term Debts	nil	250	823	663
Short-Term Debts	7	110	113	692
	<u>201</u>	<u>1634</u>	<u>1705</u>	<u>1821</u>
Total Sources	202	1646	2246	2017
<u>USES OF FUNDS</u>				
<u>Current Uses</u>				
Inventories	nil	18	112	357
Sundry Debtors	nil	nil	5	3
Cash and Bank Balances	33	546	nil	43
Other Current Uses	140	68	nil	366
	<u>173</u>	<u>632</u>	<u>117</u>	<u>769</u>
<u>Fixed Uses</u>	15	964	2100	1051
<u>Other Unclassified Uses</u>	14	50	29	197
Total Uses	202	1646	2246	2017

Appendix A.12.: List of Companies Included in the Study

Name and address of companies	Year of Registration	Authorized capital	(Rs. in lakhs)						
			Ordinary	Preference	Total	Ordinary	Preference	Total	
1	2	3	4	5	6	7	8	9	
<u>First Prospectus Issued During 1956-57:</u>									
1. Bhawani Mills Ltd. 4/3 B, Race Course Road Coimbatore	1955	20	5	25	5	2.5	-	7.5	
2. Ferro Alloys Corporation P.B.9 Shri Ram Bhawan Tinsar (Maharashtra)	1955	125	125	250	40	20	-	60	
3. Indian Electro Chemicals Yusuf Building 43, Mahatma Gandhi Road Bombay	1954	30	20	50	30	20	-	50	
4. Nagammal Mills Ltd. Pioneer Works Ltd. Clock Tower Junction College Road Nagar Coil (Madras)	1956	20	10	30	20	10	-	30	

Appendix A.12.: (Continued)

1	2	3	4	5	6	7	8	9
(Rs. in lakhs)								
5. Panyam Cement & Mineral Industries, Ltd. 2A Agle Bazar, Kurnool	1955	75	25	100	38	7	-	45
6. Polychem Ltd. 45/47 Appolo Street, Fort Bombay-1	1956	40	40	80	40	40	-	80
7. Sanagamesawara Coffee Estates 23, Errabalu Street Madras-1	1957	40	10	50	12	3.5	7	22.5
8. Sri Akkamamba Textiles Ltd. Venkataryapuram Mandapake Tannku (A.P.)	1957	75	25	100	25	-	-	25
9. Testeels Ltd C/o New Commercial Mills Co. Premises, Naroda Road Ahemdabad-2	1956	25	25	50	10	10	-	20
<u>First Prospectus Issued</u> <u>During 1957-58:</u>								
Anil Hard Boards Ltd. 1st Floor, Luxmi Insurance Building, Fort, Bombay-1	1956	50	50	100	30	10	-	40

Appendix A.12.: (Continued)

(Rs. in lakhs)								
1	2	3	4	5	6	7	8	9
2. Swinston Estates Ltd. 2nd Floor, Mercantile Bank Building No.16, Madras	1957	5	-	5	1.3	-	0.8	2.1
3. South India Tea & Coffee Estates Smith's Buildings Commissioner's Road Ootacamund	1955	25	-	25	3	-	2	5
4. Transformer & Switchgear Ltd., India Chamber Building Esplande, Madras	1956	25	-	25	5	-	-	5
<u>First Prospectus Issued</u> <u>During 1958-59:</u>								
1. Ceat Tyres 143, Mahatma Gandhi Road Bombay-1	1958	400	-	400	115	-	-	115
2. Kirloskar Pneumatic Co.Ltd. 1958 c/o M/S Kirloskar Oil Engineers Ltd., Elphiston Road, Kirkree (Poona)	1958	40	10	50	15	10	-	25
3. South India Viscouse Ltd. 1957 Kamala Nilayam, 41, Avinashi Road, Coimbatore	1957	600	400	1000	350	-	-	350

Appendix A.12.: (Continued)

1	2	3	4	5	6	7	8	9
(Rs. in lakhs)								
4. Southern Structural 14, Boag Road, Madras-17	1956	80	20	100	50	-	-	50
<u>First Prospectus Issue</u>								
<u>During 1959-60</u>								
1. Asian Cables 240, Dr. D.Naroji Road Bombay-1	1959	100	-	100	50	-	-	50
2. Baroda Rayon Corporation 76, Veer Nariman Ji Road Church Gate, Bombay.	1958	500	500	1000	349.4	-	-	349.4
3. Calcutta Steel 4, Old Court House Street Calcutta-1	1959	100	-	100	50	-	-	50
4. Cellulose Products of India Ltd., 1687, Kadwa Pole Panapur, Ahmedabad	1959	20	15	35	20	15	-	35
5. Chase Bright Steel Co. Ltd. Ready Money Mansion 3rd Floor, 43, Veer Nariman Road, Bombay-1	1959	100	-	100	30	-	-	30
6. Colour Chem Ltd. Fort House, 221, D.Naroji Road, Bombay	1956	200	-	200	100	-	-	100

Appendix A.12.: (Continued)

1	2	3	4	5	6	7	8	9
(Rs. in lakhs)								
7. Hilla Tea Estates 23, Carnac Street Calcutta-16	1959	20	5	25	12.5	-		12.5
8. Hindustan Aluminium Corporation Ltd. Industry House 158, Church Gate Reclamation Bombay-1	1958	1000	250	1250	600	250	-	850
9. Indian Rayon Corporation Allahabad Bank Building Apollo Street, Fort, Bombay-1	1956	400	400	800	140.8	52.8	-	193.6
10. Khandelwal Ferro Alloys Ltd. Khandelwal Bhawan 166, D. Naroji Road, Bombay-1	1958	150	100	250	100	50	-	150
11. Mandya National Paper Mills Ltd. 413, Kensington Road, Bangalore-1	1957	270	180	450	140	60	-	200
12. Premier Tyres Ltd. 127, Mahatma Gandhi Road Fort, Bombay-1	1959	300	100	400	150	50	-	200

Appendix A.12.: (Continued)

1	(Rs. in lakhs)								
	2	3	4	5	6	7	8	9	
<u>First Prospectus Issued</u> <u>During 1960-61</u>									
1. Adarsh Chemicals & Fertilizers Ltd. Manek Lal Road, Nav Sarai, Surat	1957	70	30	100	24	16	-	40	
2. Andmans Timber Industries 2, Dalhousie Square East Calcutta	1959	25	-	25	17.5	-	-	17.5	
3. Anuh Pharma New Atizar Bank House Carnac Road, Bombay-1	1960	50	-	50	10	-	-	10	
4. Bombay Oxygen Corpn. Ltd. Great Western Building Apollo Street, Bombay.	1960	150	150	300	150	-	-	150	
5. Citric India Ltd. Kumar Building 38, Cawsji Patel Street Fort, Bombay-1	1960	100	-	100	50	-	-	50	
6. Hindustan Tyrfords Ltd. 2, Wellesely Place Calcutta	1960	60	20	80	41.5	20	-	61.5	

Appendix A.12.: (Continued)

1	2	3	4	5	6	7	8	9
(Rs. in lakhs)								
7. Hindustan Wires Ltd. 16/5 Chaurangee Road Calcutta	1959	100	-	100	35	-	-	35
8. India Bright Steel Co.Ltd. 26-A, Ali Chamber Port, Bombay-1	1960	50	-	50	30	-	-	30
9. Jayant Paper Mills Ltd. Haripura, Surat	1960	100	-	100	25	-	-	25
10. Kothari Sugars & Chemicals Ltd., Oriental Building Armenian Street, Madras-1	1960	500	-	500	80	-	-	80
11. Madras Aluminium Co. Kamla Nilayam, Pula Medu Combatores	1960	750	250	1000	450	150	-	600
12. Madras Cements Ltd. Ramamandiram Rajpalaiyam, Madras	1957	150	50	200	50	20	-	70
13. Mahindra Electrical Ltd. Morji Kamla Mission Road Kaira District, Gujrat	1960	115	25	140	60	-	-	60
14. Mysore Cements 19. Race Course Road Mysore	1958	225	75	300	115	-	-	115

Appendix A.12.: (Continued)

1	2	3	4	5	6	7	8	9
(Rs. in lakhs)								
15. National Sugar Mills Ltd. 15, Chitranjan Avenue Calcutta	1955	25	25	50	20	15	-	35
16. Paper Mills Plants and Machinery Manufacturers Ltd., Steelcrete Home Backbay Reclamation Bombay	1960	50	50	100	40	-	-	40
17. Permanent Magnets 40, Alkapuri, Baroda	1960	100	-	100	25	-	-	25
18. Pesticides Ltd. 38-A, Sayani Road, Bombay	1960	100	-	100	50	-	-	50
19. Phillips Carbon Block Ltd. 31, Netaji Subhash Road Calcutta	1960	300	200	500	125	-	-	125
20. Premier Fertilizers 150-A Mount Road, Madras-2	1960	75	25	100	50	-	-	50
21. Rohit Paper & Pulp, Hasan Chamber, Parsi Bazar Street Fort, Bombay-1	1959	100	-	100	25	-	-	25
22. Seshayee Paper & Boards Ltd. No.1, Alexander Road Madras-1.	1960	700	300	1000	350	-	-	350

Appendix A.12.: (Continued)

1	(Rs. in lakhs)								
	2	3	4	5	6	7	8	9	
23. Ultramarine & Pigments Kamer Buildings Cawsji Patel Street, Bombay	1960	25	25	50	15	-	-	15	
24. Universal Dyestuff Industries, Hari Sadan, Khadia, Char Rasta, Ahemdabad	1960	200	-	200	50	-	-	50	
25. Usa Martin Black (Wire Rope) Ltd. 2, Ram Gopal Ghosh Road Calcutta-2	1960	125	25	150	40	10	-	50	
26. Wandleside National Conductors, Industrial Estate, Lalbaugh Bombay-12	1960	25	-	25	10	-	-	10	
27. Wm. Powell & Sons P.B.No. 859, Calcutta-1	1960	50	-	50	10	-	-	10	
28. Zenith Steel Pipes Industry House Church Gate Reclamation Bombay-1	1960	100	100	200	70	-	-	70	

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